

Trinitron Digital TV

Operating Instructions

GB

! Before operating the TV, please read the 'Safety Information' section of this manual.
Retain this manual for future reference.



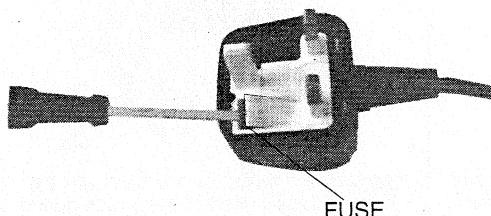
**KD-28DX200U
KD-32DX200U**

NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience. Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with Δ or \heartsuit) must be used. When an alternative type of plug is used it should be fitted with a 5 AMP fuse, otherwise the circuit should be protected by a 5 AMP fuse at the distribution board. If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service centre.

How to replace the Fuse

Open the fuse compartment with a flat blade screwdriver, and replace the fuse.

**IMPORTANT**

If the plug supplied is not suitable for the socket outlet in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:
The wires in this mains lead are coloured in accordance with the following code:

Blue	Neutral
Brown	Live

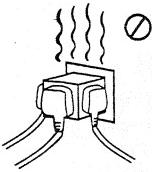
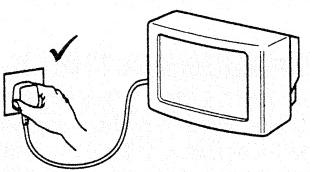
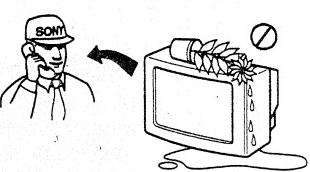
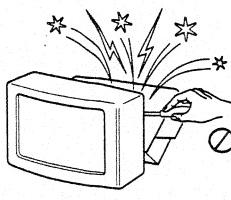
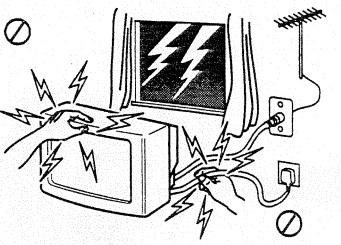
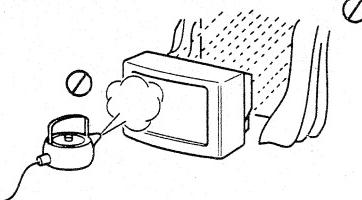
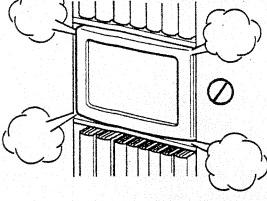
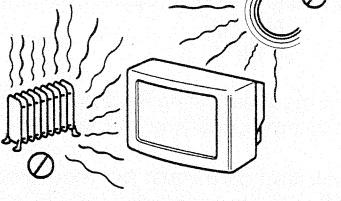
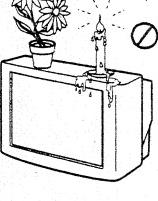
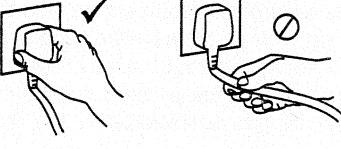
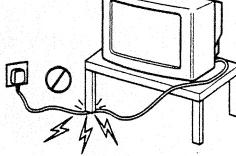
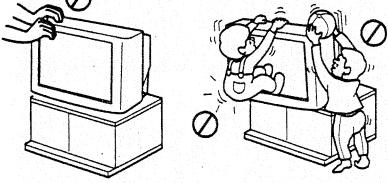
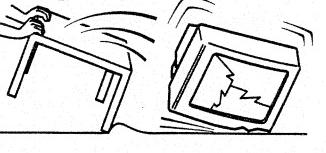
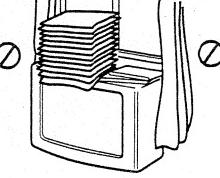
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety-earth symbol \pm or coloured green or green and yellow.

WARNING

- To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroyed.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

Safety information

 <p>This set is to operate on a 220-240V AC supply only. Take care not to connect too many appliances to the same power socket as this could result in fire or electric shock.</p>	 <p>For environmental and safety reasons, it is recommended that the TV is not left in standby when unused. Disconnect from the mains. However, some TVs may have features which need the TV to be left in standby to work correctly. The instructions in this manual will inform you if this applies.</p>	 <p>Never push objects of any kind into the set as this could result in a fire or electric shock. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the TV. Have it checked immediately by qualified personnel.</p>
 <p>Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.</p>	 <p>For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.</p>	 <p>To prevent fire or shock hazard, do not expose the TV to rain or moisture.</p>
 <p>Do not cover the ventilation openings of the TV. For ventilation, leave a space of at least 10cm all around the set.</p>	 <p>Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.</p>	 <p>Do not place any objects on the TV. To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the TV.</p>
 <p>Clean the screen and cabinet with a soft, lightly dampened cloth. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or antistatic spray. As a safety precaution, unplug the TV before cleaning it.</p>	 <p>Pull out the power lead by the plug. Do not pull on the power lead itself.</p>	 <p>Take care not to place heavy objects on the power lead as this could result in damage. We recommend you wind any excess lead around the holders provided on the rear of the TV.</p>
 <p>Place the TV on a secure stable stand. Never attempt to move the TV and stand together - always move the TV and stand separately. Do not place the TV on its side or face up. Do not allow children to climb on to it.</p>	 <p>Unplug the power lead before moving the TV. Avoid uneven surfaces, quick steps or excessive force. If the set has been dropped or damaged, have it checked immediately by qualified service personnel.</p>	 <p>Do not cover the ventilation openings of the TV with items such as curtains or newspapers etc.</p>

Getting started

Checking the accessories supplied	4
Inserting batteries into the remote control	4
Connecting an aerial and a VCR to the TV	5
Switching on the TV	5
Automatically tuning the TV	6
Switching between digital and analogue programmes	7
Finding your video channel	7

Basic operation

Overview of the TV buttons	8
Overview of the remote control buttons	9
Viewing a digital text service	10
Viewing a traditional text service	11
Using the text menu	12
Changing the screen format manually	13

Digital features

The Digital Info display	14
The Main menu	15
Favourite programme	15
Wallpaper	15
Parental control	16
Auto Tuning	16
Manual Tuning	17
PIN Code	17
Software Download	18
System Information	18
The Channel Index menu	19
Searching the digital channels list	19
Viewing the Category pop-up list	20
Creating a Favourite Programmes list	20
The EPG menu	21
Searching for digital channels	21
Viewing the Category pop-up list	21
Recording programmes	22
Setting the Manual Timer	22
Cancelling a recording	22

TV menu system

Using the TV menu system	23
Picture Adjustment menu	23
Sound Adjustment menu	24
Features menu	25
Set Up menu	25
Manual Set Up menu	26
Manual Programme Preset menu	27
Further Programme Preset menu	28

Connecting Other Equipment to the TV

Connecting equipment to the rear sockets of the TV	29
Connecting equipment to the front sockets of the TV	30
Using the remote control with VCR and DVD players	31

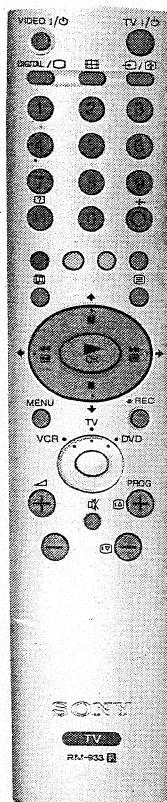
Additional information

Specifications	32
Troubleshooting	33
Index	34

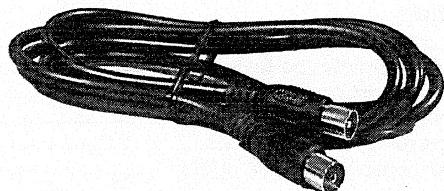
Follow steps ① - ⑦ to install your TV and view the TV programmes.

1

Checking the accessories supplied



Remote control



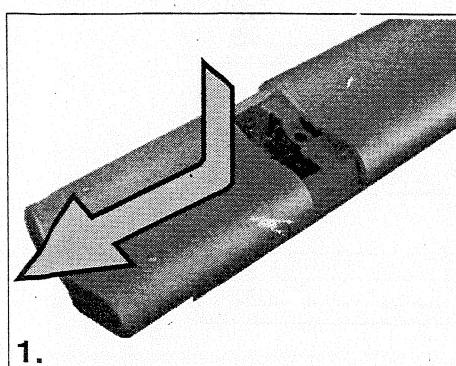
RF Loopthrough cable



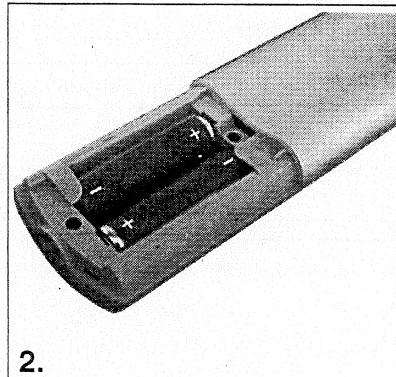
Batteries

2

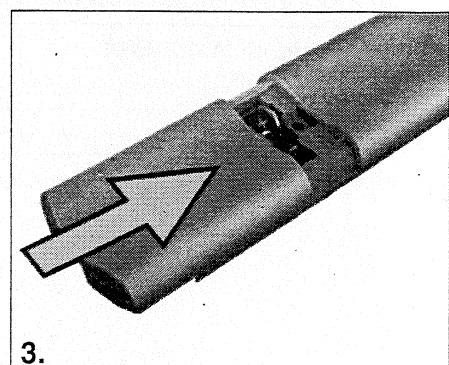
Inserting batteries into the remote control



Remove the battery cover by pushing down on the cover and sliding in the direction shown.

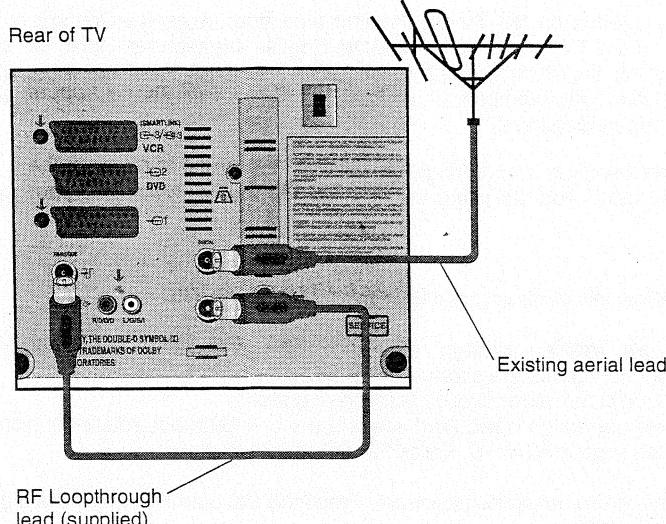


Insert the batteries as indicated in the battery compartment.

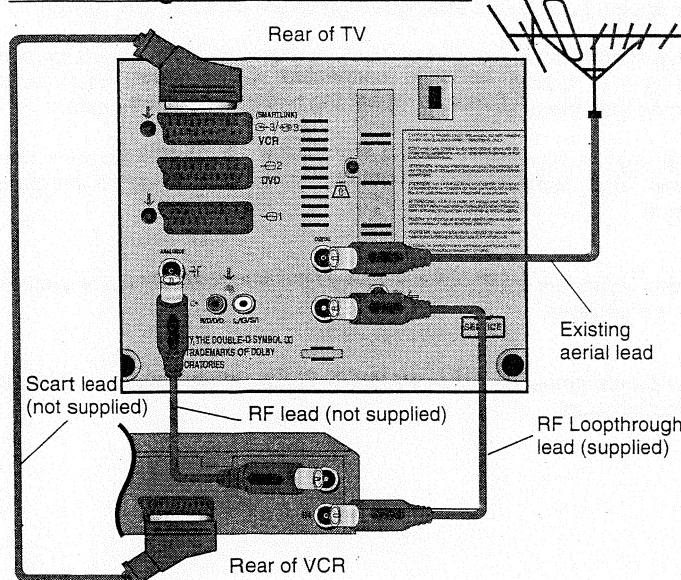


Replace the battery cover.

Always remember to dispose of batteries in an environmentally friendly way.

3**Connecting an aerial and a VCR to the TV****Connecting an aerial only**

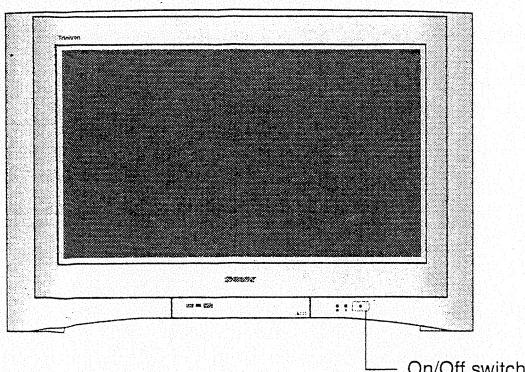
1. Connect your existing aerial lead to the digital socket marked on the rear of the TV as shown.
2. Connect the supplied RF loopthrough cable from the socket marked to the analogue socket marked .

Connecting an aerial and a VCR

1. Connect your existing aerial lead to the digital socket marked on the rear of the TV as shown.
2. Connect the supplied RF loopthrough lead from the lower socket marked on the TV to the RF IN socket on your VCR.
3. Connect a lead from the RF OUT socket of your VCR to the analogue socket marked on the TV.
4. Connect a scart lead from the socket marked on the rear of the TV to the scart socket on your VCR (refer to your VCR instruction manual).
5. Connect the VCR to the mains socket and switch on.
6. Insert a pre-recorded tape into the VCR and press the 'PLAY' button. This enables the TV to locate and store the video channel during the 'Automatically tuning the TV' procedure.

Note:

Your VCR sockets may not be labelled RF IN and RF OUT. If not, please refer to your VCR instruction manual for guidance.

4**Switching on the TV**

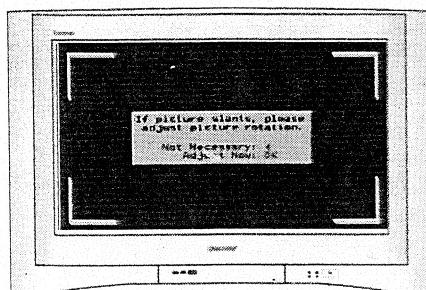
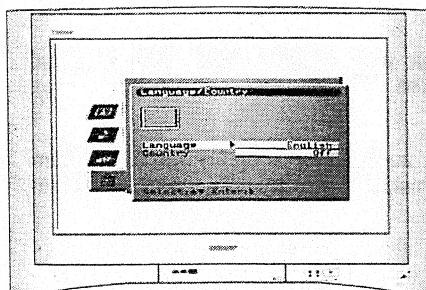
1. Connect the TV plug to your mains socket (220 - 240 V AC, 50 Hz) and switch on.
2. Push in the on/off button (labelled) on the front of the TV.

Note:

If the red indicator on the front of the TV is lit the TV is in standby mode. Press the TV button on the remote control to switch on the TV. Please be patient as the picture may take a few moments to appear on screen.

5

Automatically tuning the TV



1. When you switch on the TV for the first time, the Language/Country menu appears on the TV screen with the word 'English' highlighted. Press the **↑** or **↓** buttons on the remote control to highlight your required language then press the **OK** button to confirm your choice. From now on all menus appear in your chosen language.
2. The word Country is now highlighted. Press the **↑** or **↓** buttons to highlight the country in which you are using the TV. Press the **OK** button to confirm your choice.

Note:

The digital features of this set are designed for use in Great Britain only.

The picture rotation prompt appears. Sometimes the Earth's natural magnetism can cause the screen to look tilted.

- a) If no correction is required, press the **←** button.
- b) If some correction is required, press the **↑** or **↓** button to rotate the picture over a range of -5 to +5. Press the **OK** button to store.

The autotune prompt screen appears. Press the **OK** button to begin the digital autotune procedure.

When all the available digital programmes are found, the analogue tuning display appears and all the analogue signals are captured and stored.

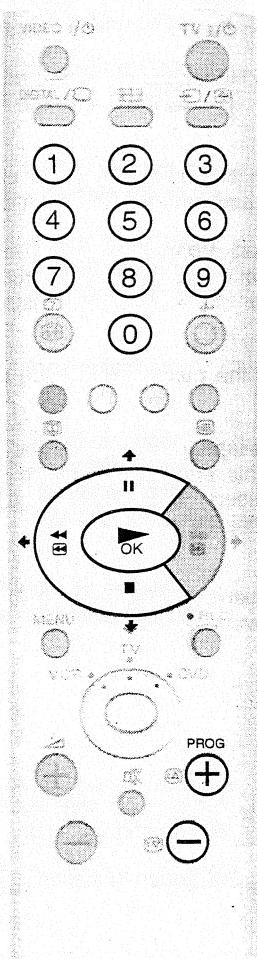
If no digital and no analogue signals are found, a display appears on screen asking you to confirm your aerial is connected. Check your aerial is connected then press the **OK** button to repeat the tuning procedure.

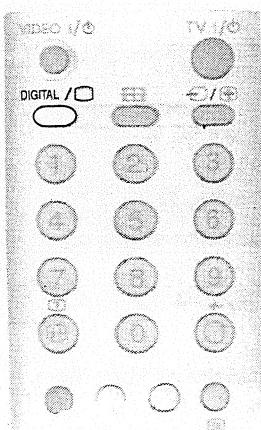
Once all signals have been captured and stored, the TV returns to normal operation and displays the digital programme captured on programme number 1.

Note:

If no digital signals are captured, then the analogue programme stored on programme number 1 is displayed.

3. To view programmes, press the **PROG+/-** button or the numbered buttons on the remote control.



6**Switching between digital and analogue programmes**

1. Press the **DIGITAL/□** button on the remote control to switch between digital and analogue mode.

Notes:

If the TV is in digital mode an information banner appears briefly on screen when you change channels.

If the TV is in analogue mode the channel number appears in green lettering when you change channels.

7**Finding your video channel**

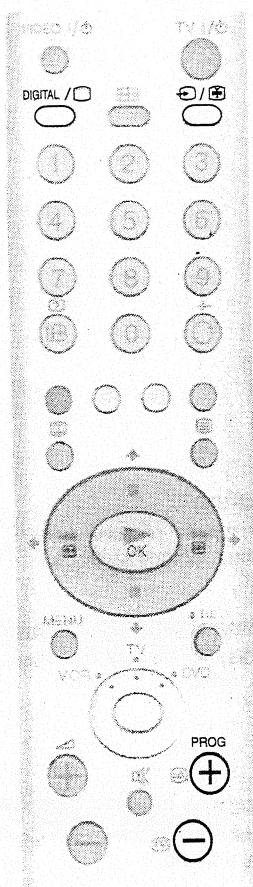
If you connected a VCR to your TV when following the 'Connecting an aerial and a VCR to the TV' instructions, you now need to find your video channel.

1. Ensure the TV is in analogue mode. If not press the **DIGITAL/□** button on the remote control.
2. Press the **PROG+/-** button on the remote control until the picture from the pre-recorded tape appears on screen.

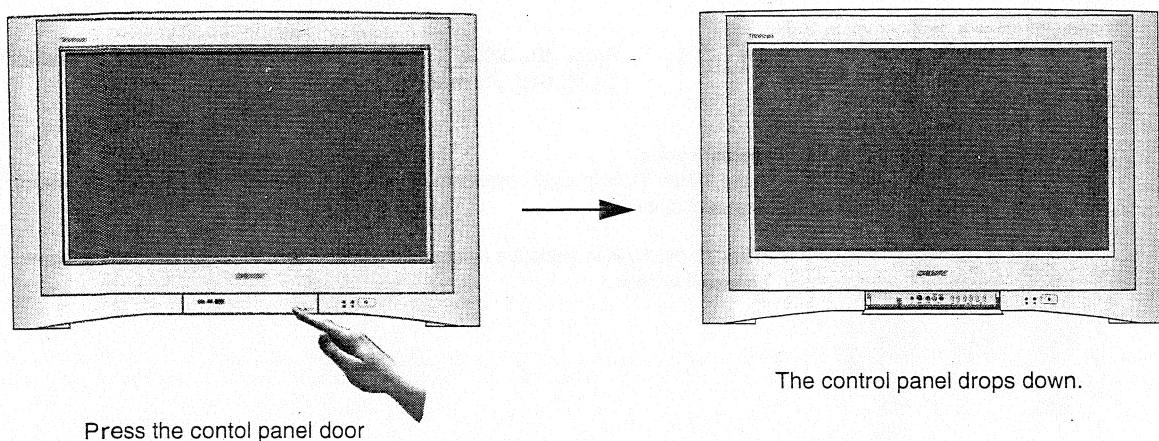
Notes:

If you wish to move your video channel to a different programme number, refer to the 'Programme Sorting' section of this manual.

If you connected your VCR using a scart lead, press the **□/□** button repeatedly on the remote control until the picture from the pre-recorded tape appears on the TV screen.

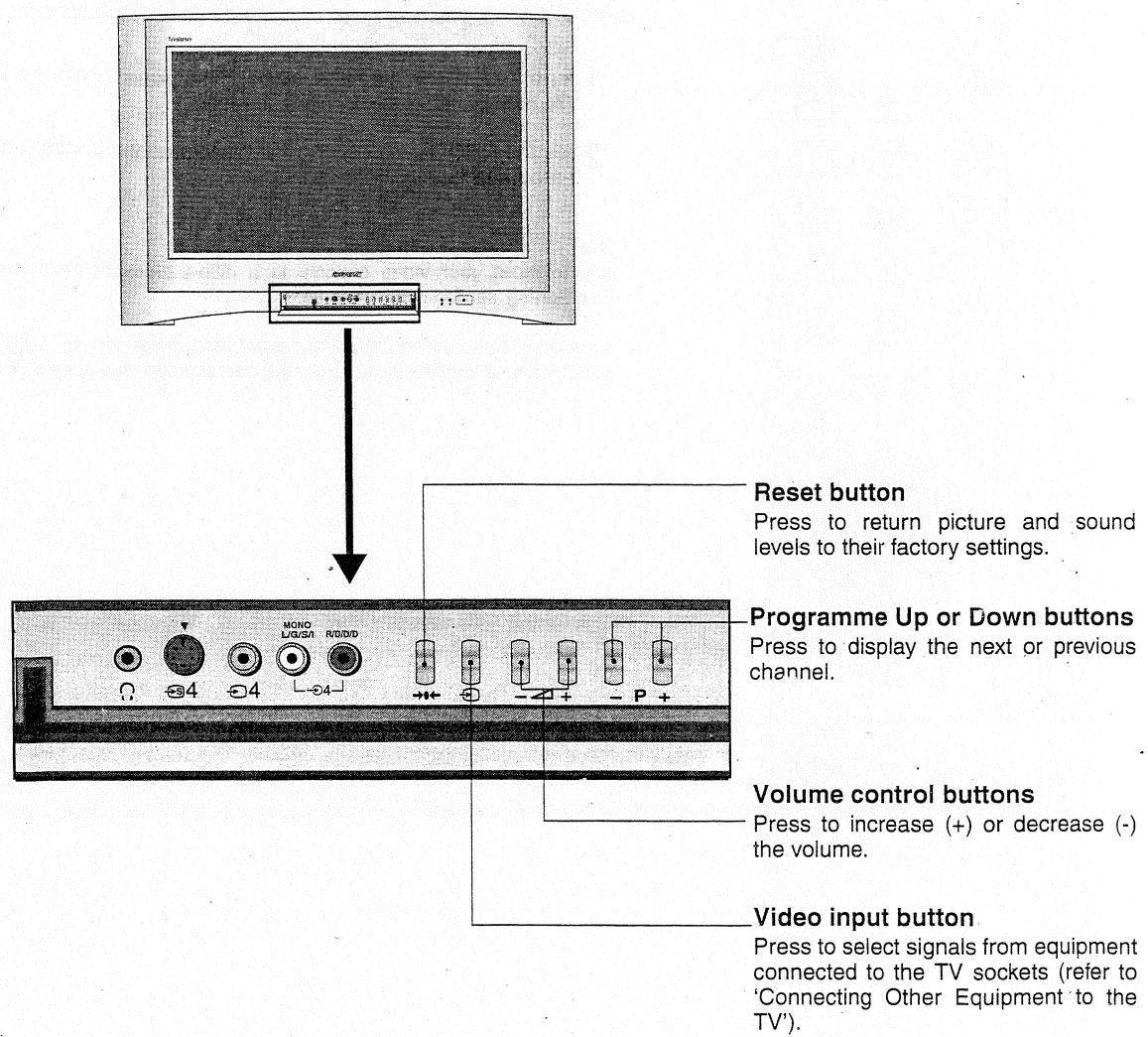


Overview of the TV buttons



Press the control panel door

The control panel drops down.



Note: For information on the front panel connectors, please refer to the 'Connecting Other Equipment to the TV' section of this instruction manual.

Overview of the remote control buttons

VIDEO I/O button

Press to switch off your VCR or DVD temporarily. Press again to resume normal operation.

DIGITAL/ \square button

Press to switch between digital and analogue mode.

Screen format button HD

Press repeatedly to change the screen format.

Buttons 0 - 9

When the Media Selector is set at TV or VCR, press to input the required channel number. For numbers 10 and above, enter the second digit within 2 seconds.

Info button $\text{i}+$ / Reveal button ?

In TV Mode: Press to display the INFO menu in digital mode. When watching analogue programmes press to reveal information such as programme number etc.

In Teletext mode: Press to reveal concealed information (e.g. answers to a quiz). Press again to cancel.

Coloured buttons

These buttons are used for the text and digital menus. Refer to the relevant sections in this instruction manual.

EPG button EPG

Press to display the Electronic Programme Guide when in digital mode.

MENU button

Press to enter the menu system of this TV.

Media Selector button

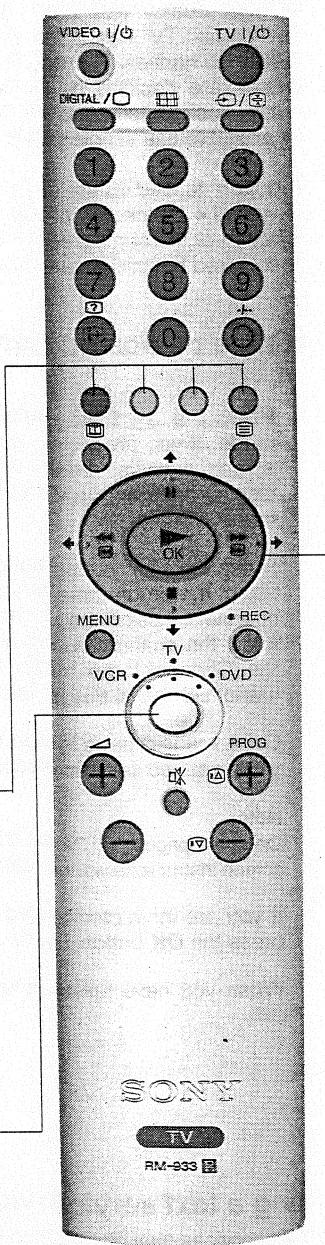
This remote operates not only Sony DVDs and VCRs, but also those made by other manufacturers. Press this button repeatedly to select the type of equipment you want to control. A green light appears momentarily to indicate the mode selected.

Note:

Before operating your VCR or DVD, you must enter the correct configuration code. Please refer to the section 'Remote control operation for VCR and DVD players'.

Volume + and - button \triangle

Press to adjust the volume to the desired level.



TV I/O button

Press to switch off your TV temporarily. The red indicator on the front of the TV illuminates. Press again to resume normal operation.

Input button SI / Hold button HL

Press to select signals from equipment connected to the TV sockets (refer to 'Connecting other equipment to the TV'). In text mode press to keep a page on display. Press again to cancel.

Previous channel button CHP

While watching analogue TV pressing this button will return you to the previous channel you were watching.

While watching digital TV pressing this button can also act as an 'EXIT' key and cancel any digital text application that may be running.

Text button $\text{T}\text{E}\text{X}\text{T}$

Press to enter the text mode.

Control pad CP

Use these buttons to navigate through the menu system of the TV.

Note:

When the Media Selector button has been set to VCR or DVD, the control pad operates the main functions of your VCR or DVD.

OK button

In analogue mode press to display a list of channels on screen. Press the \uparrow or \downarrow button to scroll through the list until the channel you wish to view is highlighted, then press the OK button to display that channel on screen.

In digital mode press to display the Channel Index menu.

REC button

When the Media Select switch is set to VCR, press this button to begin recording.

PROG +/- button

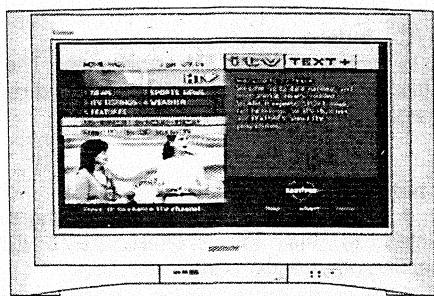
In TV mode: Press to select the next or previous programme.

In Teletext mode: Press to select the next or previous page.

Mute button $\text{M}\text{U}\text{T}\text{E}$

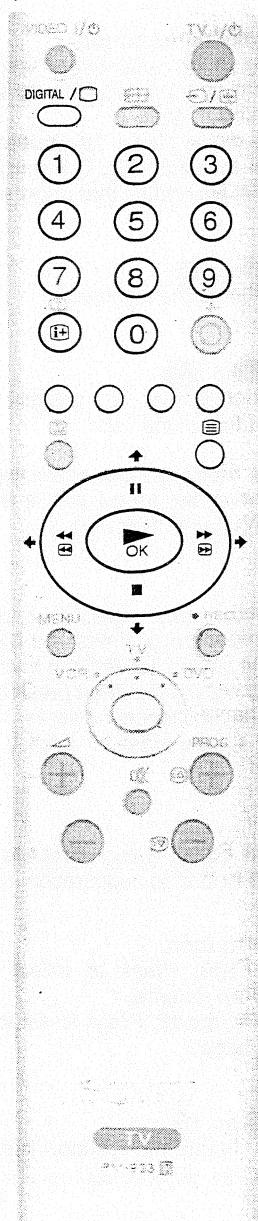
Press to mute the sound. Press again to restore.

Viewing a digital text service



Most digital TV channels broadcast information via their text service. This digital service includes high quality text and graphics along with advanced navigation options. Additionally, this TV has access to dedicated text channels transmitted by the broadcasting authorities. The appearance, content and navigation methods of all digital text services are decided by the broadcaster. For example, the BBC's digital text service may look different to ITV's digital text. However, the digital text services currently available use simple navigation methods based on the following buttons:

The button to load up the digital text,
The , , , and buttons (to move around the screen),
The **OK** button or the numbered buttons (to select items on screen),
The four coloured buttons (to access shortcuts).



Selecting a dedicated digital text channel

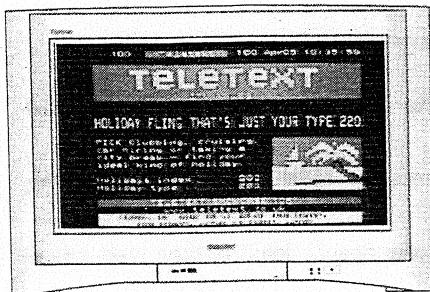
1. Press the button on the remote control to check if you are in digital mode. If you are watching a digital programme an Info display appears on screen providing brief details for the current and next programme. If the display does not appear, press the **DIGITAL/□** button to switch to digital mode.
 2. Press the button to remove the Info display from the TV screen then select the programme number that is broadcasting the dedicated digital text channel by using the numbered buttons on the remote control. If you do not know the channel number of a dedicated digital text channel, you can use the 'Channel Index menu' to find one. (Please refer to the 'Channel index menu' section of this manual.)
 3. Once the text page is displayed, follow the on-screen instructions to obtain your required selection.
- Note:**
On some pages the TV programme may also be displayed on the text screen. On-screen instructions will inform you how to change the displayed programme.
4. If you are instructed to press 'OK' or 'Select' when viewing the text pages, press the **OK** button.
 5. When you have finished viewing the text service, press the button to exit.

Selecting a text service from other digital channels

Normal text services may also be available on other digital channels. This is sometimes indicated by a small symbol on your TV screen, superimposed on the programme you are watching.

1. Press the , , , or buttons to select the symbol, then press the **OK** button to display the chosen information.
2. Alternatively, you may be instructed to use the numbered or coloured buttons on your remote control to display the various pages of text information. If you are instructed to press 'OK' or 'Select' when viewing the text pages, press the **OK** button.
3. Once the text information is displayed, you can access required information by using the , , , or buttons, the coloured buttons and/or the numbered buttons on the remote control.
4. When you have finished viewing the text service, press the button to exit.

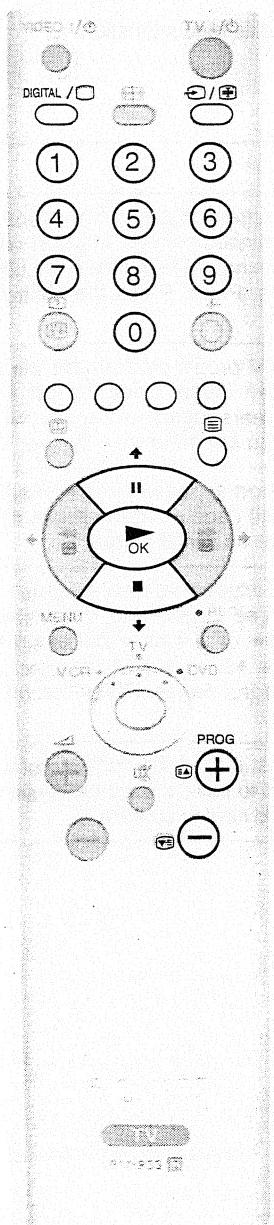
Viewing a traditional text service



Most analogue TV channels broadcast a text service. The index page (usually page 100) provides information on how to use the service. Please ensure you are receiving a strong signal or some text errors may occur.

Switching on the text service

1. Select the TV channel that carries the text service you wish to view.
2. Press the button to enter Picture and Text (P&T) mode. The screen is divided into two with the Text display on the left and the TV channel in the right corner.
Press the button a second time to enter full screen Text mode.
Press the button a third time to enter Mix mode.
3. Press the numbered buttons to enter a three digit number for the text page you wish to view. Your selected page appears on screen.
4. Enter more 3 digit page numbers as required.
5. When you have finished viewing the text service, press the **DIGITAL/□** button to remove the text display from the screen.



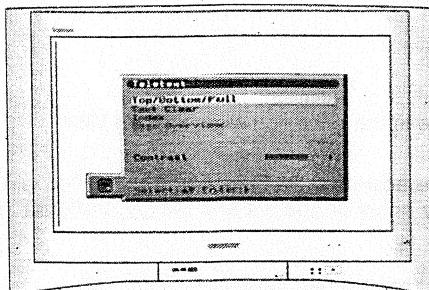
How to use the text features

Text Features	How to select
To select the next or preceding page	Press the or button.
To select a sub page	A text page can consist of several sub pages. In this case an information box is displayed at the bottom of the screen showing the number of sub pages available. Select the sub pages by pressing the or button.
To keep a page on display	Press the button. Press again to cancel.
To use Fastext	Fastext allows you to access pages with one button push. When Fastext is available, four coloured items appear at the bottom of the screen. Press the corresponding coloured button on the remote control to display the page.
To use the Page Catching feature	Select a page that contains several page numbers (e.g. the index page), then press the OK button. Press the or button to highlight the page number required, then press the OK button again. Your selected page appears on screen.

Viewing a traditional text service

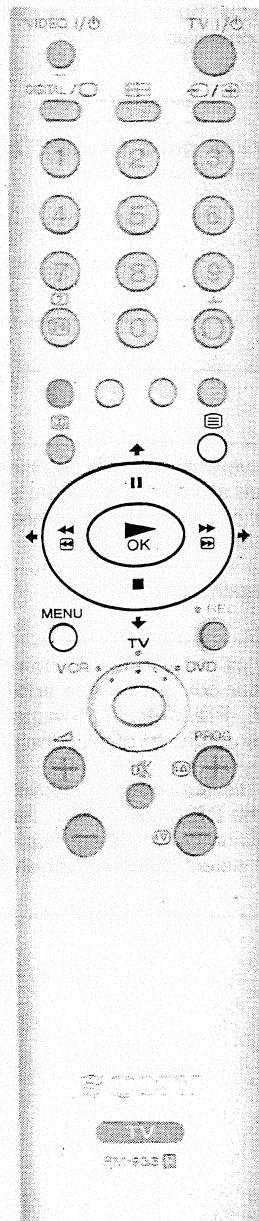
Using the text menu

You can access more features by using the text menu:



1. Press the button on your remote control to enter the traditional text mode.
2. With the text display on screen, press the **MENU** button to display the 'Teletext' menu.
3. Press the **↑** or **↓** button to highlight your desired feature, then press the **→** button to select.
4. Press the **MENU** button to remove the 'Teletext' menu from the screen.

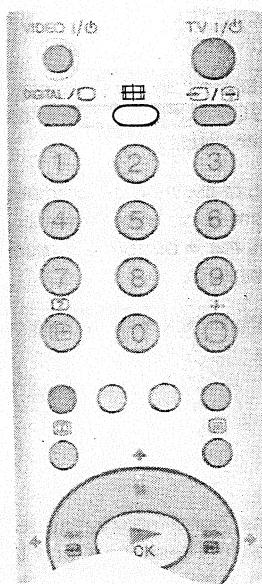
The following table explains each feature and its function.



Feature	Function
Top/Bottom/Full	This feature allows you to enlarge sections of the displayed page. Press the ↑ button to enlarge the upper half of the page or ↓ to enlarge the bottom half. Press the OK button to return the page to normal size. Press the MENU button to return to the 'Teletext' menu.
Text Clear (not available in P&T mode)	Use this feature to watch a TV programme whilst the text service is searching for a page. Once the page has been found, a blue symbol appears in the top left corner of the screen. Press the button to view the page.
Index	Most Text services contain an index page which lists all the available pages and their 3 digit page number. Press the → button to display the index page on screen.
Page Overview (only for TOPText broadcasts)	TOP-Text pages are divided into two columns. The first column shows 'blocks' of pages and the second shows 'groups' of pages. Press the → or ← button to select the desired column, then press the ↑ or ↓ button to select the relevant 'group' or 'block' of pages. Press the OK button to display the chosen pages.
Contrast	This feature allows you to adjust the contrast setting of Text pages. Press the → or ← button to increase or decrease the contrast. Press the OK button to confirm.

Changing the screen format manually

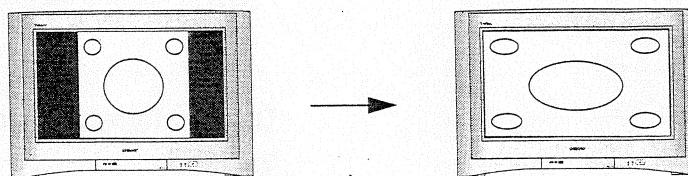
The broadcaster may transmit programmes in more than one format (e.g. 4:3 format or Widescreen format). You can change the screen format manually to suit the broadcast you are watching. Press the  button on the remote control to choose one of the 5 formats listed below.



Wide-

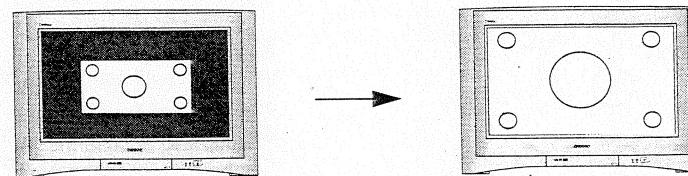


For 16:9 broadcasts.



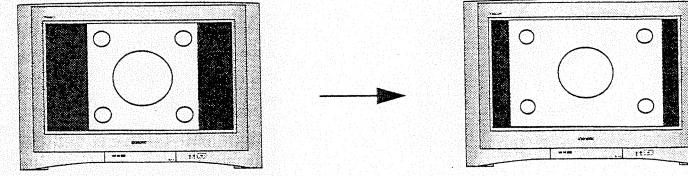
For 4:3 broadcasts.

Zoom-



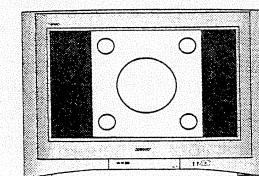
Imitation of wide screen effect for movies broadcast in cinematic (letter box) format.

14:9-



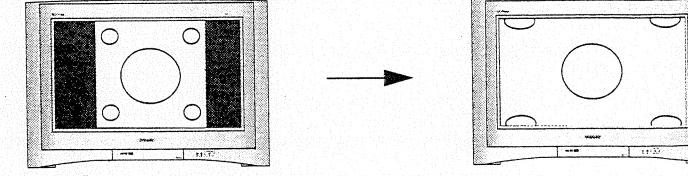
Compromise between the 4:3 and 16:9 format.

4:3-



Conventional screen format.

Smart-

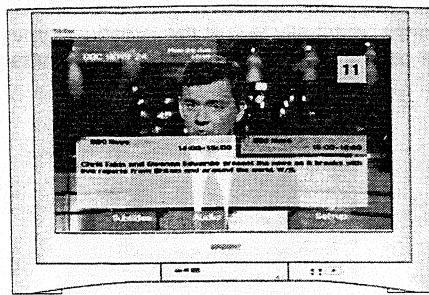


Imitation of wide screen effect for 4:3 broadcasts.

Note:

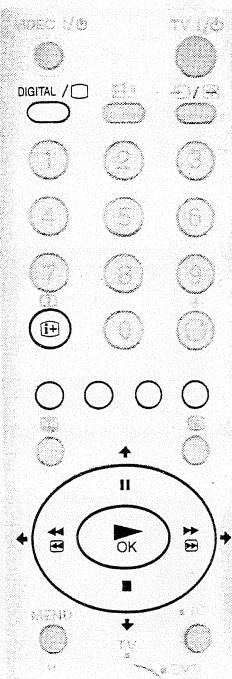
In Smart, Zoom and 14:9 modes, parts of the top and bottom of the screen are cut off. Press the  or  button to adjust the position of the image on screen (e.g. to read subtitles).

The Digital Info display



This display gives you information for the current programme being shown and for the next scheduled programme.

1. Press the **I+** button on the remote control to view the Info display. If the display does not appear, press the **DIGITAL/□** button to switch to digital mode, then press the **I+** button to view the Info display.
2. Press the **→** button to obtain a brief description of the next programme in the schedule. If the programme box is blank, there is no information currently available. To return to the starting point, press the **←** button repeatedly until the description for the current programme reappears.
3. Press the **I+** button on the remote control at any time to exit the Info display.



Using other Info features

Subtitles

This feature places digital subtitles on the screen. With the Digital Info display on screen, press the **RED** button to access the 'Subtitles' pop-up menu. Press the **↑** or **↓** button to highlight the language you wish the subtitles to appear in, then press **OK** to select.

Audio

When a multi language broadcast is available, this feature allows you listen to the broadcast in your selected language. With the Digital Info display on screen, press the **GREEN** button to access the 'Audio' pop-up menu. Press the **↑** or **↓** button to highlight the language required then press **OK** to select.

REC

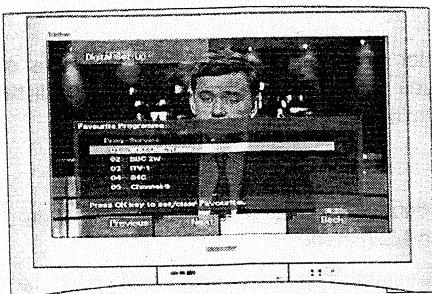
When you highlight a current programme, the 'REC' feature allows you to automatically set your VCR to record the selected programme (only if you have a Smartlink VCR), or you can select 'Wake up' to have the TV switch to the correct channel automatically when the programme starts. With the Digital Info display on screen, press the **YELLOW** button to access the 'REC' pop-up menu. You can now press the **RED** button to record the event or the **GREEN** button to activate the Wake up facility. If your VCR does not have Smartlink a message is displayed reminding you to manually set your VCR. Press the **RED** button to continue or press the **BLUE** button to return to the Info display.

When you highlight a future programme, the 'Timer' facility allows you to set your VCR to automatically record the selected programme, or set the TV to automatically switch to the correct channel when the selected programme starts. Press the **RED** button if you wish your VCR to automatically record the selected programme when it starts (only if your VCR has Smartlink facility), or press the **GREEN** button if you wish the programme to appear on your TV screen when transmission begins.

Set-up

Press the **BLUE** button to access the 'Main menu'. The Main menu is explained on the following pages.

The Main menu



The Main menu contains several features that allow you to customise the digital side of the TV. The Main menu is only available when watching digital channels. To check you are in digital mode, press the **DIGITAL/□** button on the remote control. An information banner appears briefly on screen when you change channels. If the banner does not appear, press the **DIGITAL/□** button.

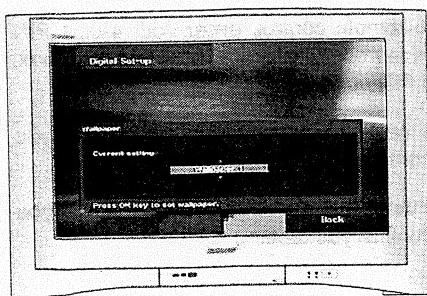
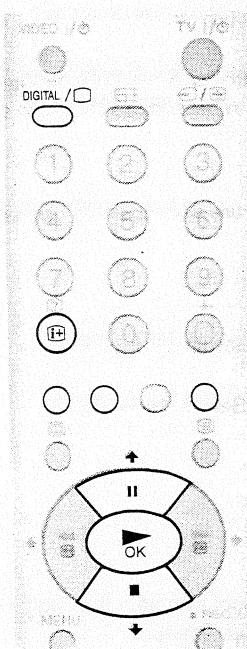
Favourite programme

This feature allows you to store your favourite channels in a list for quick access.

1. Press the **i+** button on the remote control to obtain the Digital Info display.
Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Favourite Programme', then press the **OK** button to display the Favourite Programme menu.
3. Press the **↑** or **↓** button to scroll through the list until the programme you wish to store as a favourite is highlighted. If you do not wish to select any of the displayed programmes as a favourite, press the **RED** or **GREEN** button to display the previous or next 5 programmes in the list (if more than 5 programmes are available).
4. When you have found and highlighted a programme you want to store as a favourite, press the **OK** button. A tick appears alongside that programme in the display. If you wish to cancel your selection, press the **OK** button again.
5. Repeat steps 3 and 4 to store other programmes as favourites, then press the **BLUE** button repeatedly to remove all menus.

Note:

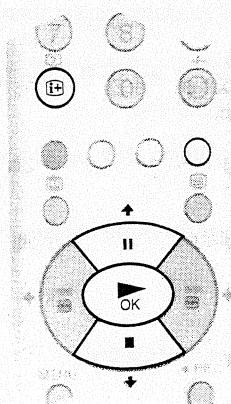
For information on how to use this list, please refer to the 'Channel Index menu'.



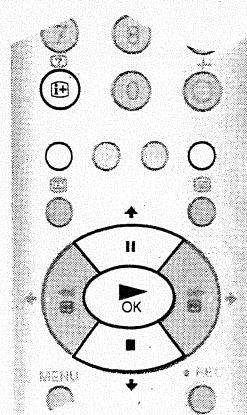
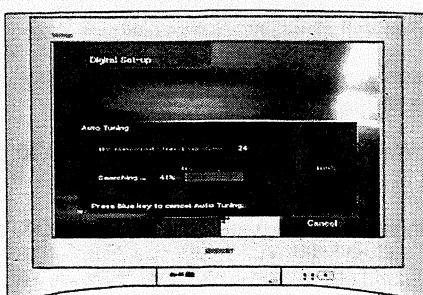
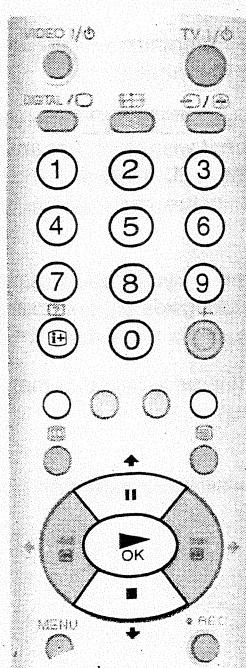
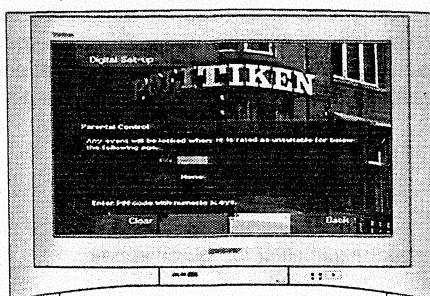
Wallpaper

This feature allows you to customise the background pattern for all the digital menus.

1. Press the **i+** button on the remote control to obtain the Digital Info display.
Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Wallpaper' then press the **OK** button to display the Wallpaper menu.
3. Press the **↑** or **↓** button to select your choice of wall paper then press the **OK** button to store.
4. Press the **BLUE** button repeatedly to remove all menus.



The Main menu



Parental Control

This feature allows you to set an age limit for viewing programmes. If any films or programmes classed above the age limit you have set are broadcast, you will be requested to enter a PIN code before viewing is allowed.

If you have not already set a PIN code:

1. Press the **i+** button on the remote control to obtain the Digital Info display. Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Parental Control' then press the **OK** button to display the Parental Control menu.
3. Press the **RED** button to display the PIN entry box on screen.
4. Use the numbered buttons on the remote control to enter a 4-digit number of your choice. As you enter each digit it will be represented by a * in the PIN entry box. Enter the code again to confirm.

Note:

This will be your PIN number for the future - please use a number you can remember easily.

5. Press the **OK** button to confirm your PIN code.
6. Press the **BLUE** button to return to the Detail Set-up menu.
7. Press the **BLUE** button to return to the Digital Set-up menu.

Follow Steps 2-5 of the instructions below:

If you have already set a PIN code:

1. Press the **i+** button on the remote control to obtain the Digital Info display. Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Parental Control' then press the **OK** button to display the Parental Control menu.
3. Using the numbered buttons on the remote control, enter your 4-digit PIN code. As you enter each digit it will be represented by a * in the PIN entry box. Press the **OK** button to confirm your PIN code.
4. With the 'Age' box highlighted, press the **↑** or **↓** button to set the age limit you desire then press the **OK** button to confirm your setting.
5. With the 'Age' box highlighted, press the **↑** or **↓** button to set the age limit you desire then press the **OK** button to confirm your setting.

Auto Tuning

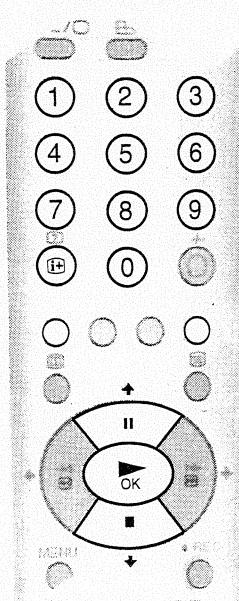
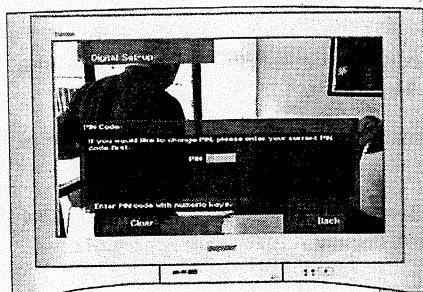
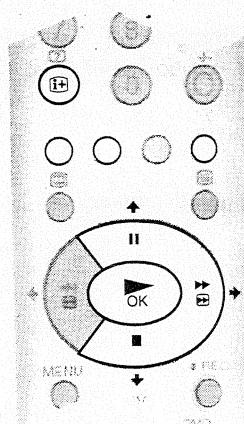
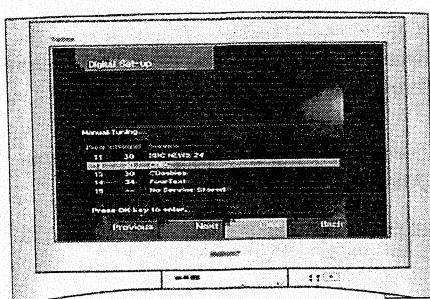
This feature allows you to automatically re-tune all available digital channels.

1. Press the **i+** button on the remote control to obtain the Digital Info display. Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Auto Tuning' then press the **OK** button to display the Auto Tuning menu.
3. Press the **RED** button to begin tuning in all available digital channels.

Note:

If you wish to cancel the 'Auto Tuning' process, press the **BLUE** button.

The Main menu



Manual Tuning

This feature allows you to manually add digital channels one by one to your TV.

1. Press the **I+** button on the remote control to obtain the Digital Info display.
Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Detail Set-up' then press the **OK** button to display the Detail Set-up screen.
3. Press the **↑** or **↓** button to highlight 'Manual Tuning' then press the **OK** button to display the Manual Tuning menu.
4. Press the **↑** or **↓** button to highlight the chosen programme number for your new channel. If you do not wish to select any of the programme numbers listed, press the **RED** or **GREEN** button to display the previous or next 5 programme numbers on the list (if more than 5 programme numbers are available).
5. With your programme number highlighted, press the **OK** button to display the 'Manual Programme Search' screen.
6. Press the **↑** or **↓** button if you wish to change the channel number, then press the **→** button to make the select search box active.
7. Press the **↑** or **↓** button to begin the search process. The words 'Searching up' or 'Searching down' appear in the select search box indicating that the TV is searching. If no digital services are found on the channel you have chosen, the channel number changes up or down automatically and the search continues. When all services allocated to the selected channel have been found, the service selection screen is displayed.
8. Press the **↑** or **↓** button to find and highlight the service you wish to allocate to the programme number selected in Step 4, then press the **OK** button to store.
9. Repeat Steps 4 to 8 if you wish to manually add more channels to your TV.
Press the **BLUE** button repeatedly to remove all menus.

PIN Code

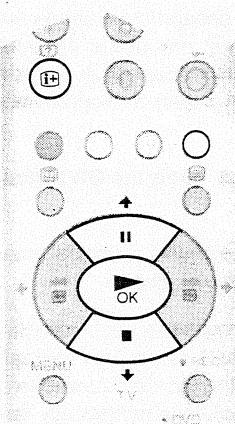
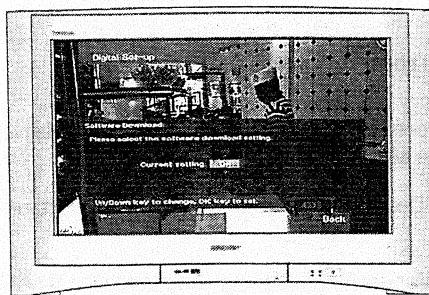
This feature allows you to set a new 4-digit PIN code.

1. Press the **I+** button on the remote control to obtain the Digital Info display.
Press the **BLUE** button to display the Main menu.
2. Press the **↑** or **↓** button to highlight 'Detail Set-up' then press the **OK** button to display the Detail Set-up menu.
3. Press the **↑** or **↓** button to highlight 'PIN Code' then press the **OK** button to display the PIN Code menu.
4. Enter your existing PIN code using the numbered buttons on the remote control. If you enter a wrong number, press the **RED** button to clear and start again.
5. Once you have entered your PIN code, a new PIN screen appears. Enter your new PIN code, then enter once again as instructed for confirmation.
6. When both PIN codes match, a message appears to inform you that your new PIN code has been accepted. This is the PIN code you must use in future.
7. Press the **BLUE** button repeatedly to remove all menus.

Note:

If you have forgotten your PIN code, please use 9999. This PIN code will always be accepted.

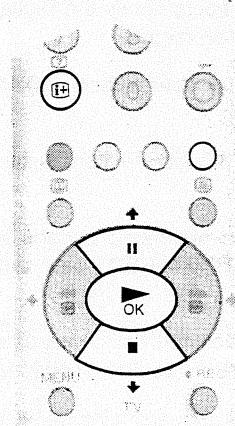
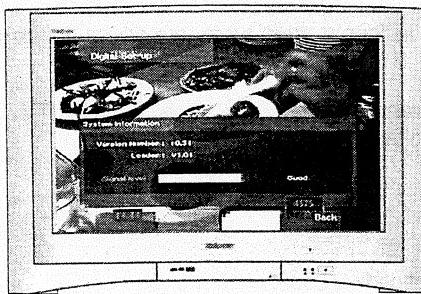
The Main menu



Software Download

Periodically Sony will issue updates for the software that controls your TV. This feature will allow you to automatically receive updates through your existing aerial.

1. Press the **i** button on the remote control to obtain the Digital Info menu.
Press the **BLUE** button to display the Main menu.
 2. Press the **↑** or **↓** button to highlight 'Detail Set-up' then press the **OK** button to display the Detail Set-up menu.
 3. Press the **↑** or **↓** button to highlight 'Software Download' then press the **OK** button to display the Software Download menu.
 4. Press the **↑** or **↓** button to change the 'Current Setting'. If you wish to receive downloads, set the 'Current Setting' to 'On'. If you do not wish to receive downloads, set the 'Current Setting' to 'Off'.
 5. Press the **OK** button to confirm.
 6. Press the **BLUE** button repeatedly to remove all menus .

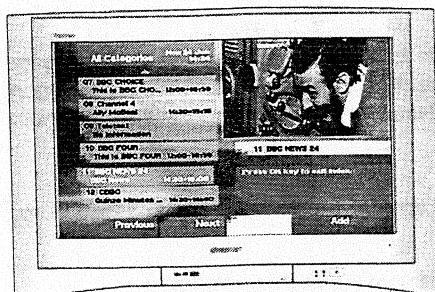


System Information

This is an information screen only. It tells you the current version of the software in your TV together with the signal quality, as indicated by the coloured bar in the display.

1. Press the **i+** button on the remote control to obtain the Digital Info menu. Press the **BLUE** button to display the Main menu.
 2. Press the **↑** or **↓** button to highlight 'Detail Set-up' then press the **OK** button to display the Detail Set-up menu.
 3. Press the **↑** or **↓** button to highlight 'System Information' then press the **OK** button to display the System Information display.
 4. Press the **BLUE** button repeatedly to remove all menus.

The Channel Index menu



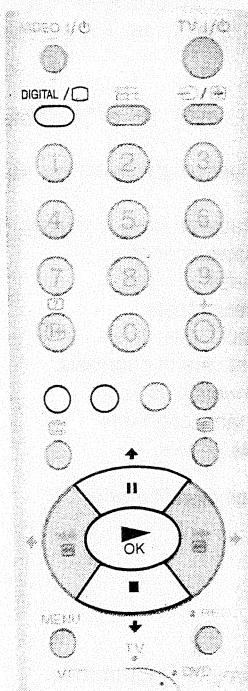
The Channel Index menu provides a quick and easy way to:-

- View a complete list of programmes available for selection
- Obtain a preview of the programmes contained in the list
- Create a list relating to a category of programme, e.g. Sports or Movies
- Store programmes into a personal favourite list

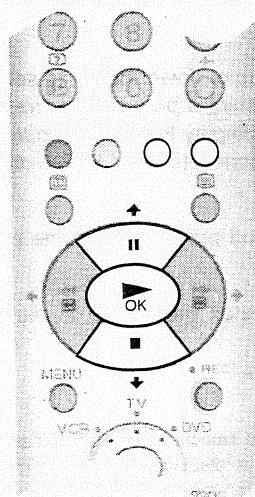
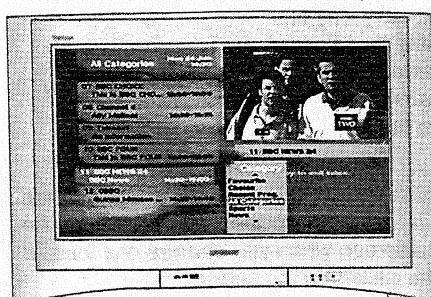
1. The Channel Index menu is only available in digital mode. To check you are in digital mode, press the **DIGITAL/□** button on the remote control. An information banner appears briefly on screen when you change channels. If the banner does not appear, press the **DIGITAL/□** button.
2. Press the **OK** button to display the Channel Index menu. This menu contains a list of all available programmes. The highlighted programme is previewed in the top right corner of the screen with its number and channel name displayed below it.
3. Press the **↑** or **↓** buttons to move the cursor up or down the list to select the desired programme. If you do not want to select a programme from the 6 channels listed, press the **GREEN** button to display the next 6 channels or the **RED** button to display the preceding 6 channels (if more than 6 channels are available).
4. Press the **OK** button to display the highlighted programme in the preview window*.
5. Press the **OK** button to exit the Channel Index menu and to view your selected programme in full screen size.

Note:

* If an age limit for viewing has been set and the programme selected exceeds that age limit, you will need to enter your PIN code before the preview is displayed. Refer to 'The Main menu' for more information on the 'PIN Code' feature. Programmes that exceed the age limit you have set are identified by a symbol.



The Channel Index menu



The Category pop-up list

The Category pop-up list allows you to search for programmes quickly by dividing the channels into different categories. For example, if you select 'News' from the Category pop-up list, then only programmes related to News will be shown in the Channel Index menu.

1. With the Channel Index menu on screen, press the **YELLOW** button to display the Category pop-up list.
2. Press the **↑** or **↓** buttons to highlight the required category.
3. Press the **OK** button. The Channel Index list now contains programmes only of the type selected. The selected category is displayed in a title bar at the top of the programme list along with the date and time. The following categories are available:

Favourite	Contains a list of your favourite programmes (see below).
Choice	contains a list of the programmes you most frequently watch.
Recent Prog.	Contains the last 5 programmes you watched.
All Categories	Contains all available channels.
Sports	Contains all sport channels.
News	Contains all news channels.
Film	Contains all film channels.
Entertainment	Contains all entertainment channels.
Lifestyle	Contains all lifestyle channels.
Education	Contains all education channels.
Kids	Contains all kids channels.
4. Press the **BLUE** button repeatedly to remove all menus.

Favourite Programmes

This feature allows you to create a list of your favourite programmes.

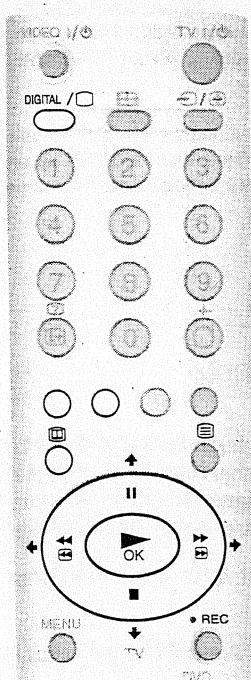
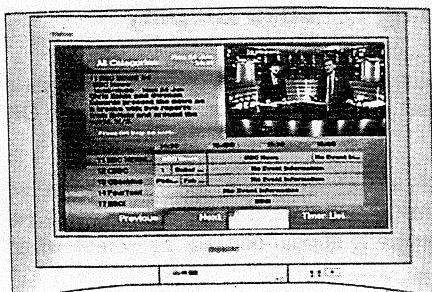
To add a programme to the Favourite list:

1. With the Channel Index menu on screen, press the **↑** or **↓** buttons to highlight the programme you want as a favourite.
2. Press the **BLUE** button to store the programme in the favourite list.

To remove a programme from the Favourite list:

1. With the Channel Index menu on screen, press the **YELLOW** button to access the Category pop-up menu.
2. Press the **↑** or **↓** buttons to highlight the 'Favourite' category. Press the **OK** button to display the Favourite category list.
3. Press the **↑** or **↓** buttons to highlight the programme you wish to remove from the Favourite list.
4. Press the **BLUE** button to remove the programme.
5. Press the **YELLOW** button and select the category you wish to return to, then press the **OK** button.

The EPG menu



The EPG menu (Electronic Programme Guide) provides a quick and easy way to:-

- View a complete list of the programmes available.
- Obtain a preview of the programmes currently being broadcast.
- Create a list relating to a category of programme, e.g. Sports or Movies.
- Record programmes.

- The EPG menu is only available when watching digital channels. To check you are in digital mode, press the **DIGITAL/□** button on the remote control. An information banner appears briefly on screen when you change channels. If the banner does not appear, press the **DIGITAL/□** button.
- Press the **□** button to display the EPG menu screen. This screen consists of an information window, a preview window, a 2 hour timer bar (divided into 30 minute intervals) and a 5 channel programme list covering the 2 hour period.
- Press the **↑** or **↓** buttons to move the cursor bar up or down the programme list and the **→** or **←** buttons to move left and right. If you press the **→** button once more after highlighting the last programme on the right, the programmes scheduled for the next 2 hour period are displayed. As each programme is highlighted, a brief description of the programme appears in the event information box at the top left of the screen. If you do not wish to select a programme from the 5 channels listed, press the **GREEN** button to display the next 5 channels or **RED** button to display the previous 5 channels (if more than 5 channels are available).
- If a programme you highlight is currently being broadcast, you will be prompted to press the **OK** button to obtain a preview.

Note:

If an age limit for viewing has been set and the programme selected exceeds that age limit, you will need to enter your PIN code before the preview is displayed. Refer to 'The Main menu' for more information on the 'PIN Code' feature. Programmes that exceed the age limit you have set will be identified by a **■** symbol.

- When the programme in the preview screen is the one you want, press the **OK** button to exit the EPG menu and view the programme at full size.

The Category pop-up list

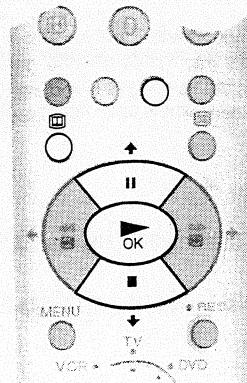
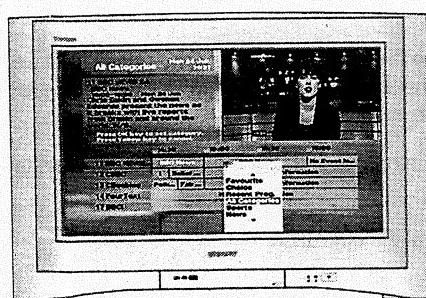
The Category pop-up list allows you to search for programmes quickly by dividing the channels into different categories. For example, if you select 'News' from the Category pop-up list, then only programmes related to News will be shown in the EPG menu.

- With the EPG menu on screen, press the **YELLOW** button to display the Category pop-up list.
- Press the **↑** or **↓** buttons to highlight the category you want, then press the **OK** button. The EPG programme list will now only contain programmes of the type selected.

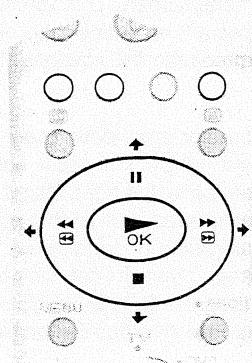
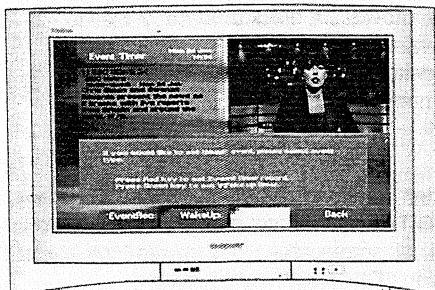
Some examples of category types are as follows:

Choice	This is a list compiled from the programmes you view most often.
Recent Prog.	This list contains the last 5 channels you have watched.
Fav1	This list contains channels you have stored in this folder as favourites.
Movies	This list contains all the movies available for viewing.
All Programmes	This is a complete list of all available programmes.

- Your chosen category is displayed at the top of the list along with the date and time of day.
- Press the **□** button to exit the EPG menu.



The EPG menu



To select a programme for recording or timed display

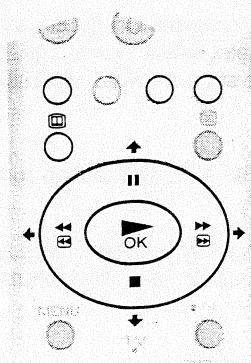
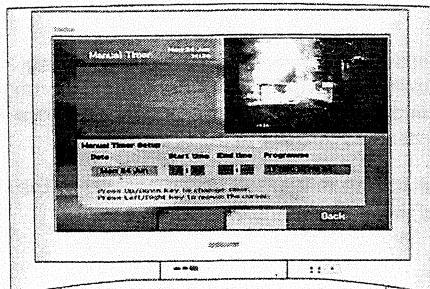
- With the EPG menu on screen, press the **↑**, **↓**, **←** or **→** buttons to highlight a future programme in the EPG menu that you wish to record, then press the **OK** button. The Timer screen appears.
- Press the **RED** button and your VCR will automatically record the selected programme when it starts (only if your VCR has Smartlink facility), or press the **GREEN** button if you wish the programme to appear on your TV screen when transmission begins.

Notes:

If you do not have a Smartlink VCR, a message appears on screen informing you to set the timer on your VCR. Press the **RED** button to continue, then set the timer recording function on your VCR to correspond with the programme you have selected for recording. Press the **BLUE** button to remove the Timer display.

When a programme has been stored for recording, a solid bar appears in the EPG display directly under the timer bar. This solid bar shows you the amount of time allocated to a recording, and reminds you that you are unable to record any other programmes during that period of time.

To set the Manual Timer



- With the EPG menu on screen, press the **BLUE** button to display the Timer List menu, then press the **RED** button to select 'Manual Rec'. If your VCR does not have Smartlink, a message will be displayed reminding you to set your VCR timer. Press the **RED** button to display the 'Manual Timer Setup' menu.
- Press the **↑** or **↓** buttons to select the correct date. Press the **→** button to highlight the start time.
- Press the **↑** or **↓** buttons to select the start time. Press the **→** button to highlight the stop time.
- Press the **↑** or **↓** buttons to select the stop time. Press the **→** button to highlight the programme.
- Press the **↑** or **↓** buttons to select the channel. Press the **OK** button to store. The Timer List menu is displayed. The event is now stored in the Timer List. Press the **BLUE** button to return to the main EPG screen.
- Press the **RED** button and repeat steps 2-5 if you wish to store further programmes for recording.
- Press the **OK** button to return to normal TV operation.
- Set the timer recording function on your VCR to switch on and off to correspond with the programmes you have stored for recording.

Notes on Recording and Manual Timer modes:

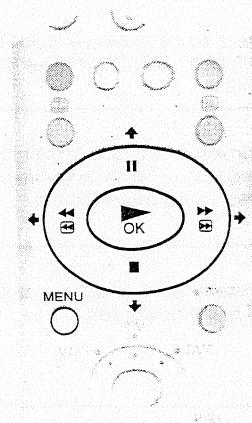
After setting the recording you can put the TV into its standby mode, but do not switch off completely or the recording will be cancelled. If you put the TV into standby mode, the standby indicator on the front of the TV flashes green periodically to remind you that a recording has been programmed. Once recording has started, do not change channels or switch to analogue mode or the recording will be cancelled.

To cancel a recording

- With the EPG menu on screen, press the **BLUE** button to display the Timer List.
- Press the **↑**, **↓**, **←** or **→** buttons to highlight the programme/event you wish to cancel.
- Press the **YELLOW** button to cancel.

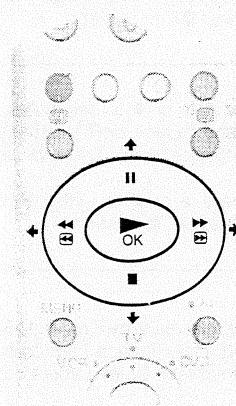
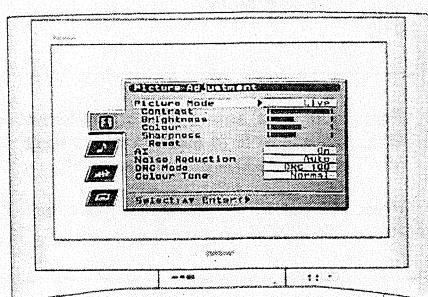
The following pages explain the TV set up menus and their operation. Although most of these menus can be accessed whilst watching digital programmes, we recommend you view them in analogue mode. To check which mode you are in, press the **(+)** button on the remote control. If you are watching a digital programme, an Info display appears on screen providing brief details for the current and next programme. If this happens, press the **DIGITAL/** **(□)** button on the remote control to switch to analogue channels.

Using the TV menu system



This TV contains a menu system which is based on a series of on screen displays. These displays help you get the most from your TV, from customising the picture and sound to accessing advanced features. Use the following buttons on the remote control to operate the TV menu system.

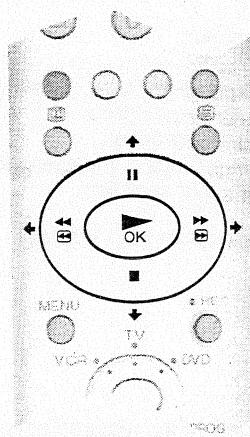
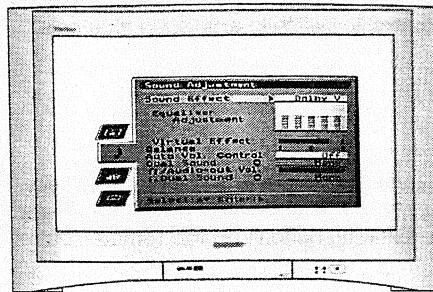
1. Press the **MENU** button to display the main menu.
2. Use the following buttons to operate the menu:
 - Press the **↓** or **↑** buttons to highlight the required menu or option.
 - Press the **→** button to enter the required menu or option.
 - Press the **←** button to return to the last menu or option.
 - Press the **↓**, **↑**, **←** or **→** buttons to alter the settings of the selected option.
 - Press the **OK** button to confirm and store your selection.
3. Press the **MENU** button to remove the menu from the TV screen.



Picture Adjustment menu

This menu allows you to customise the picture. Highlight the required option and press **→** to select. The table below explains each option and how to use it.

Option	How to use
Picture Mode This option allows you to select one of four picture modes. Live, Movie and Game modes are preset and only Contrast can be adjusted. The Personal mode, however, also allows you to adjust the Brightness, Colour and Sharpness options.	Press ↑ or ↓ to select Live, Personal, Movie or Game. Press OK to confirm.
Contrast, Brightness, Colour, Sharpness These options allow you to adjust the contrast, brightness, colour and sharpness. Note: Brightness, Colour and Sharpness can only be adjusted when Picture Mode is set to Personal.	Press ← or → to set the levels. Press OK to confirm.
Reset This option resets all picture settings to the factory preset levels.	Press → to restore default picture settings.
AI (Artificial Intelligence) This option monitors the picture and limits any sudden increases in Brightness and Contrast.	Press ↑ or ↓ to select On or Off. Press OK to confirm.
Noise Reduction Sometimes a weak signal can produce a snowy picture (called Picture Noise). This option can help to reduce this effect.	Press ↑ or ↓ to select High, Mid, Low, Auto or Off. Press OK to confirm.
DRC Mode DRC (Digital Reality Creation) Mode allows you to enjoy higher quality pictures. The settings available are: Off: Basic 100Hz picture quality. DRC 50: Improved picture resolution. DRC 100: Optimum picture resolution	Press ↑ or ↓ to select Off, DRC 50 or DRC 100. Press OK to confirm.
Colour Tone This option allows you to alter the tint of the picture. The settings available are: Warm: Gives the white colours a red tint. Normal: Gives the white colours a neutral tint. Cool: Gives the white colours a blue tint.	Press ↑ or ↓ to select Warm, Normal or Cool. Press OK to confirm.



Sound Adjustment menu

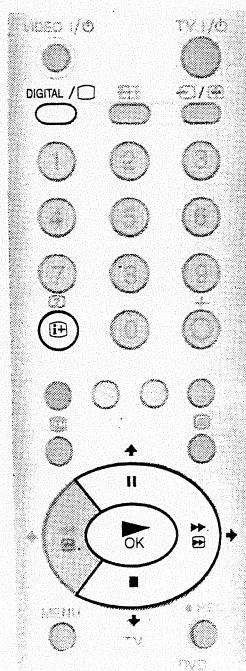
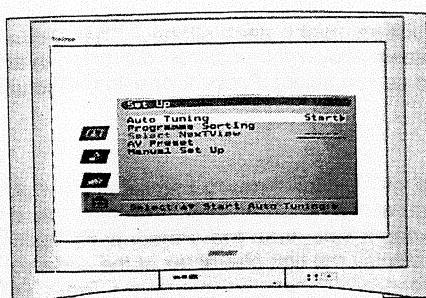
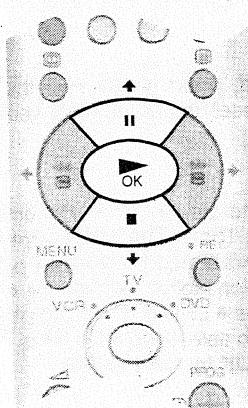
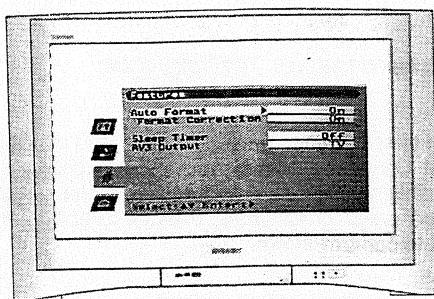
This menu allows you to customise the sound. Highlight the required option and press **→** to select. The table below explains each option and how to use it.

Option	How to use
Sound Effect This option allows you to select one of four sound modes.	Press ↑ or ↓ to select Personal, Dolby V*, Dynamic** or Natural**. Press OK to confirm.
Equaliser Adjustment This option allows you to customise the sound by adjusting five frequency bands. Note: This feature is only available when Sound Effect is set to Personal.	Press ↔ or → to select the required band. Press ↑ or ↓ to adjust the frequency level. Press OK to confirm.
Virtual Effect This option allows you to adjust the level of the surround sound effect when listening to a Dolby surround sound broadcast. Note: This option is only available when Sound Effect is set to 'Dolby V'.	Press ↔ or → to set the level of effect. Press OK to confirm.
Balance This option allows you to set the balance of sound between the left and right speakers.	Press ↔ or → to set the balance. Press OK to confirm.
Auto Vol. Control Sometimes the broadcast volume level changes (e.g. adverts tend to be louder than programmes). This option allows you to cancel this effect, giving a constant volume level.	Press ↑ or ↓ to select Off or On. Press OK to confirm.
Dual Sound When receiving a bilingual broadcast: This option allows you to choose which language to listen to. When receiving a stereo broadcast: This option allows you to choose between Mono or Stereo sound.	Press ↑ or ↓ to select A to listen to the first language or B to listen to the second language. Press OK to confirm. Press ↑ or ↓ to select Mono or Stereo. Press OK to confirm.
Audio-out Vol. This option allows you to simultaneously set the volume level for the headphone socket and the volume level of the Audio output phono sockets on the rear of the TV.	Press ↔ or → to set the volume for the headphone and Audio output sockets. Press OK to confirm.
Dual Sound When receiving a bilingual broadcast: This option allows you to choose which language to listen to. When receiving a stereo broadcast: This option allows you to choose between Mono or Stereo sound.	Press ↑ or ↓ to select A to listen to the first language or B to listen to the second language. Press OK to confirm. Press ↑ or ↓ to select Mono or Stereo. Press OK to confirm.

Notes:

* When 'Dolby V' is selected, the TV simulates the full effects of Dolby Pro Logic Surround sound without the need for additional speakers. Manufactured under licence from Dolby Laboratories. 'Dolby', 'Pro Logic' and the double D symbol are trademarks of Dolby Laboratories.

** 'Natural' and 'Dynamic' are functions of the 'BBE High Definition Sound System'. This system enhances clarity, detail, presence of sound and increases musical realism.



Features menu

This menu allows you to set the sleep timer and to set a signal to be output from the AV3 socket. The table below explains each option and how to use it:

Auto Format With this option switched on, the TV can automatically adjust the picture size to suit the broadcast.	Press ↑ or ↓ to select 'On' or 'Off'. Press OK to confirm.
Format Correction* <i>(*only if 'Auto Format' is switched on)</i> When viewing 4:3 or 14:9 broadcasts there will be dark areas visible at the edge of the screen. The settings available are: Off: Dark areas remain on the TV screen. On: The TV automatically switches to Smart mode, eliminating any dark areas on the TV screen.	Press ↑ or ↓ to select 'On' or 'Off'. Press OK to confirm.
Sleep Timer This option allows you to set a period of time after which the TV switches itself into standby mode. This can be in 10 minute intervals up to a maximum of 90 minutes.	Press ↑ or ↓ to select the period of time required. Press OK to confirm.
AV3 Output This option allows you to set which signal source is output from the AV3 scart socket (labelled $\ominus 3/\oplus 3$) on the rear of the TV. If you connect a VCR to this socket you can record from equipment connected to the other sockets of the TV. The settings available are: Ana. TV: Always outputs the tuned analogue TV signal. Digi. TV: Always outputs the tuned digital TV signal. AV1: Outputs the signal from equipment connected to the $\ominus 1$ socket on the rear of the TV. AV2: Outputs the signal from equipment connected to the $\ominus 2$ socket on the rear of the TV. AV3: Outputs the signal from equipment connected to the $\ominus 3/\oplus 3$ socket on the rear of the TV. AV4: Outputs the signal from equipment connected to the $\ominus 4/\oplus 4$ socket on the front of the TV.	Press ↑ or ↓ to select TV, AV1, AV2, AV3, or AV4. Press OK to confirm.

Set Up menu

This menu contains the following advanced features that allow you to customise the TV. To check which mode you are in, press the **i** button on the remote control. If you are watching a digital programme, an Info display appears on screen providing brief details for the current and next programme. If this happens, press the **DIGITAL/** **□** button on the remote control to switch to analogue channels.

Auto Tuning

(for analogue channels only)

All the available channels were tuned in when the TV was first installed. The 'Auto Tuning' option in the 'Set Up' menu allows you to repeat that process (e.g. to re-install the TV at an alternative location or search for new channels that have been launched by broadcasters). With the 'Auto Tuning' option highlighted, press **→** to select. The autotune prompt appears on screen. Press **OK** to start the auto tuning process. When all available channels have been tuned the TV returns to normal operation.

Programme Sorting

(for analogue channels only)

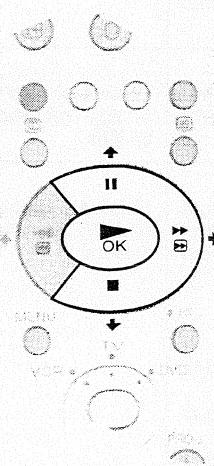
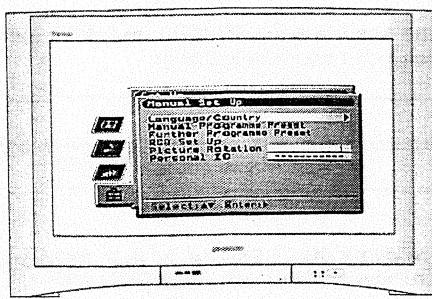
The 'Programme Sorting' option in the 'Set Up' menu allows you to change the order in which the channels are stored on the TV. With the 'Programme Sorting' option highlighted, press **→** to enter the 'Programme Sorting' menu. Press **↓** or **↑** to highlight the channel you wish to move to a new position, then press **→** to select. Press **↓** or **↑** to highlight the new position for your channel, then press **OK**. Your chosen channel has now moved to the new position. Repeat to move other channels if required.

AV Preset

The 'AV Preset' option in the 'Set Up' menu allows you to assign a name to any equipment connected to the AV sockets of the TV. The name is displayed briefly on screen when the equipment is selected. With the 'AV Preset' option highlighted, press **→** to enter the 'AV Preset' menu. Press **↓** or **↑** to highlight the socket you wish to name. Press **→** to select the LABEL column. Press **↓** or **↑** to select the first character. Press **→** to confirm this character. Select the other characters in the same way (up to a maximum of five characters). After selecting all required characters, press **OK** to store.

Manual Set Up

With the 'Manual Set Up' option highlighted, press **→** to enter the 'Manual Set Up' menu. The 'Manual Set Up' menu is explained on the following page.



Manual Set Up menu

This menu gives you access to more advanced features. The options are:

Language/Country

When you first installed the TV you were asked to select your language and country. The 'Language/Country' option in the 'Manual Set Up' menu allows you to change these settings. With the 'Language/Country' option highlighted, press **→** to enter the 'Language/Country' menu. Press **↓** or **↑** to select 'Language' or 'Country'. Press **→** to select. Press **↓** or **↑** to highlight the required setting. Press **OK** to confirm.

Manual Programme Preset

With the 'Manual Programme Preset' option highlighted, press **→** to enter the 'Manual Programme Preset' menu. The 'Manual Programme Preset' menu is explained on the following page.

Further Programme Preset

With the 'Further Programme Preset' option highlighted, press **→** to enter the 'Further Programme Preset' menu. The 'Further Programme Preset' menu is explained on page 28.

RGB Set Up

When viewing signals from RGB equipment connected to the AV1 or AV2 sockets (e.g. DVD player, PlayStation) the picture may need adjusting. The 'RGB Set Up' option in the 'Manual Set Up' menu allows you to adjust the size and horizontal picture position of signals from RGB equipment. With the 'RGB Set Up' option highlighted, press **→** to enter the 'RGB Set Up' menu. Press **→** to select H Centre. Press **↓** or **↑** to centralise the picture over a range of -10 to +10. Press **OK** to store. Press **↓** to select H Size. Press **↓** or **↑** to adjust the picture size over a range of -10 to +10. Press **OK** to store.

Note:

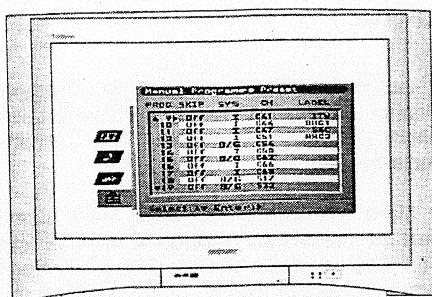
If there is no RGB equipment connected to either the AV1 or AV2 scart sockets the 'RGB Set Up' option will not be available.

Picture Rotation

Due to the Earth's natural magnetism the picture might slant slightly. The 'Picture Rotation' option in the 'Manual Set Up' menu allows you to cancel out this effect. With the 'Picture Rotation' option highlighted, press **→** to select. Press **↓** or **↑** to rotate the picture over a range of -5 to +5. Press **OK** to store.

Personal ID

The 'Personal ID' option in the 'Manual Set Up' menu allows you to enter a code which could help to trace you should the TV be stolen and recovered. This code can only be entered once - please make a note of it and keep it safe. With the 'Personal ID' option highlighted, press **→** to select. Press **↓** or **↑** to display the first character of the code you wish to use. Press **→** to select. Repeat until all characters have been entered. Press **OK** to store. A confirmation screen is displayed. Press **OK** to confirm.



Manual Programme Preset menu (for analogue channels only)

To check which mode you are in, press the **I+** button on the remote control. If you are watching a digital programme, an Info display appears on screen providing brief details for the current and next programme. If this happens, press the **DIGITAL/** **□** button on the remote control to switch to analogue channels.

The 'Manual Programme Preset' option in the 'Manual Set Up' menu allows you to manually tune in channels. With the 'Manual Programme Preset' option highlighted, press **→** to enter the 'Manual Programme Preset' menu. Press **↓** or **↑** to highlight the channel you wish to tune. Press **→** twice to select the **SYS** column. Press **↓** or **↑** to select the TV broadcast system (Choose **I** for TV broadcasts or **EXT** for an external input source). Press **→** to confirm and select the **CH** column. Press **↓** or **↑** to select the channel tuning (**C** for terrestrial channels, **S** for cable channels or **F** for direct frequency input). Press **→** to confirm. You now need to tune the channel by one of the following methods:

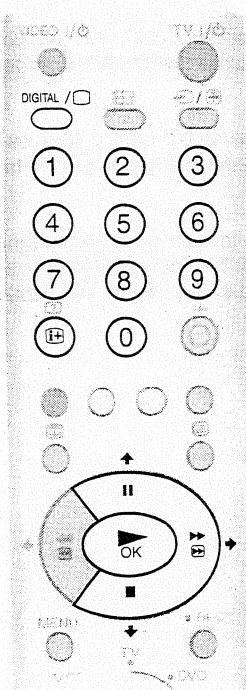
- (a) If you know the channel number of the TV broadcast, the VCR test signal or the frequency:
Press the **numbered** buttons on the remote control to enter the channel number.
Press **OK** to store.
- (b) If you do not know the channel number:
Press **↓** to select **SEARCH**. The TV set automatically searches for the next available TV broadcast channel or the VCR test signal. When a channel has been found press either **OK** to store or **↓** to continue searching.
- (c) For external input sources (**EXT**):
Press **↓** to select **AV1**, **AV2**, **AV3**, or **AV4** depending on which socket you have used to connect your equipment. Press **OK** to store.

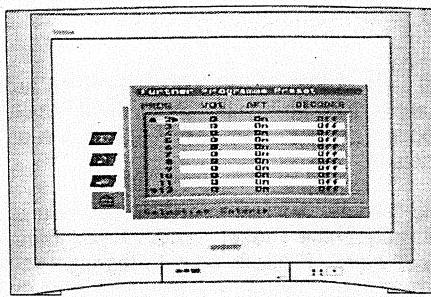
Naming a channel

Names for channels are usually taken automatically from Teletext (if available). This name is displayed briefly on screen when the channel is selected. The 'LABEL' option in the 'Manual Programme Preset' menu allows you to assign a name of your choice up to 5 characters or numbers. With the 'Manual Programme Preset' option highlighted, press **→** to enter the 'Manual Programme Preset' menu. Press **↓** or **↑** to highlight the channel number you require. Press **→** repeatedly to select the **LABEL** column. Press **↓** or **↑** to select the first character. Press **→** to confirm this character. Select the other characters in the same way. After selecting all required characters, press **OK** to store.

Skipping a channel

The 'SKIP' option in the 'Manual Programme Preset' menu allows you to skip unused channel positions when selecting channels with the **PROG+/-** buttons. However, you can still select skipped channels by using the **numbered** buttons on the remote control. With the 'Manual Programme Preset' option highlighted, press **→** to enter the 'Manual Programme Preset' menu. Press **↓** or **↑** to highlight the channel number you require. Press **→** to select the **SKIP** column. Press **↓** to select **On** (select **Off** to remove the **SKIP** feature). Press **OK** to store.

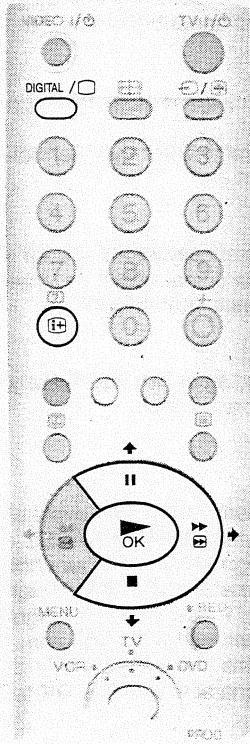




Further Programme Preset menu (for analogue channels only)

To check which mode you are in, press the INFO button on the remote control. If you are watching a digital programme, an Info display appears on screen providing brief details for the current and next programme. If this happens, press the **DIGITAL** \square button on the remote control to switch to analogue channels.

The 'Further Programme Preset' option in the 'Manual Set Up' menu allows you to set the volume level of an individual channel, fine tune the TV and set up a channel for viewing signals from a decoder. With the 'Further Programme Preset' option highlighted, press \rightarrow to enter the 'Further Programme Preset' menu. Press \downarrow or \uparrow to highlight the channel number you require. Press \rightarrow repeatedly to select one of the following options:

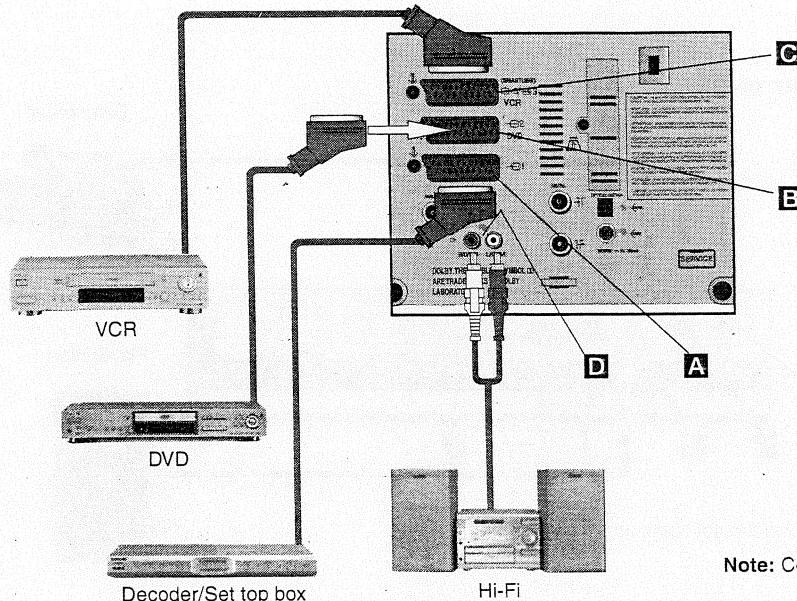


- (a) **VOL** (Volume Level Offset). This allows you to set the volume level for an individual channel. Press \downarrow or \uparrow to adjust the volume level over a range of -7 to +7. Press **OK** to store.
- (b) **AFT** (Automatic Fine Tune). This allows you to fine tune a channel. Press \downarrow or \uparrow to select On. Alternatively, press \downarrow or \uparrow to manually adjust the tuning frequency over a range of -15 to +15. Press **OK** to store.
- (c) **DECODER**. This allows you to set a channel for viewing scrambled signals (e.g. from a pay TV decoder). Press \downarrow or \uparrow to select AV1 or AV3 depending on which socket the equipment is connected to. Press **OK** to store. The unscrambled signal now appears on the selected channel.

Connecting Other Equipment to the TV

A wide range of equipment can be connected to the TV through the front and rear sockets.

Connecting equipment to the rear sockets of the TV



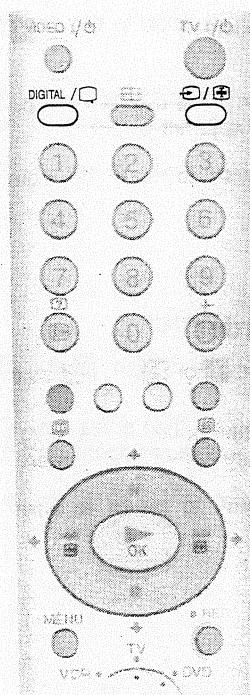
Note: Connecting cables are not supplied.

Connecting a Decoder/Set top box

1. Connect a scart lead from the **A** socket of the TV to a scart socket on your set top box (refer to your set top box instruction manual).
2. Switch on your set top box. The picture appears automatically on the TV. If not, press the $\text{TV}/\text{SET UP}$ button on the remote control repeatedly until the picture appears on screen.
3. Press the **DIGITAL/** button when you wish to return to normal TV operation

Connecting a DVD player

1. Connect a scart lead from the **B** socket of the TV to a scart socket on your DVD player (refer to your DVD instruction manual)
2. Insert a DVD into the DVD player, then press the 'PLAY' button. The picture appears automatically on the TV. If not, press the $\text{TV}/\text{SET UP}$ button on the remote control repeatedly until the picture appears on screen.
3. Press the **DIGITAL/** button when you wish to return to normal TV operation.



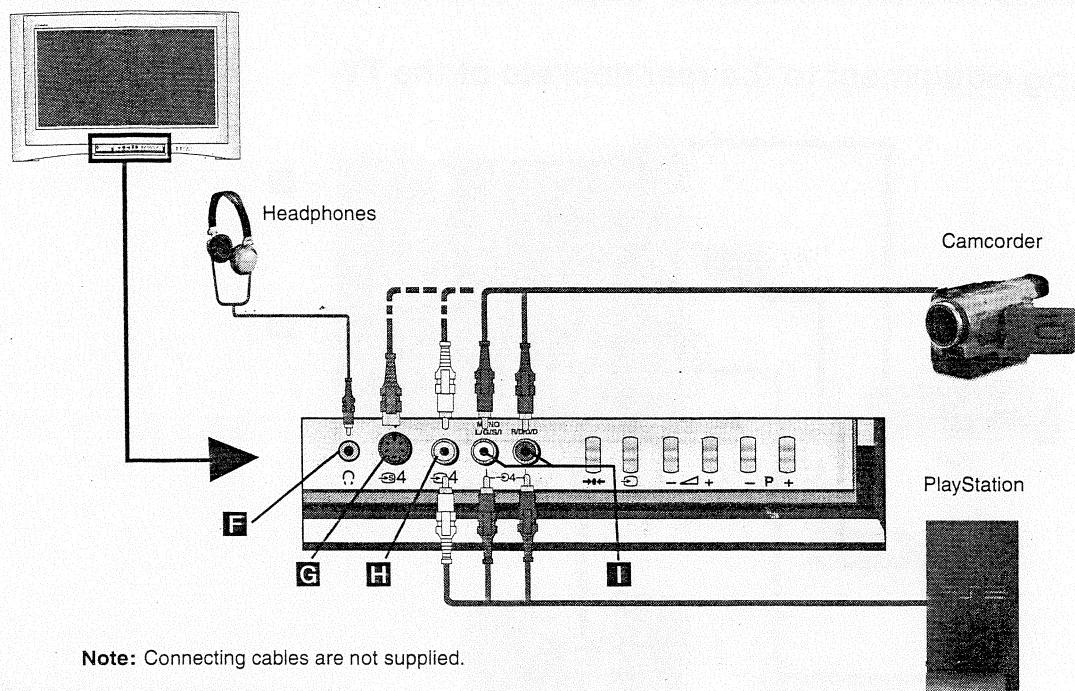
Connecting a Smartlink VCR

Smartlink is a direct link between the TV and a Smartlink VCR. Ensure your Smartlink VCR is connected to the **C** socket labelled **(SMARTLINK) $\text{G} \rightarrow 3/\text{S} 3$ VCR**, using a fully wired 21 pin scart lead. For more information on Smartlink, refer to your Smartlink VCR instruction manual.

Connecting to external audio equipment

1. Connect a phono jack lead from the **D** sockets of the TV to your Hi-Fi (refer to your Hi-Fi instruction manual).
2. Use the 'Audio-out vol.' option in the 'Sound Adjustment' menu to adjust the volume level (refer to page 24).

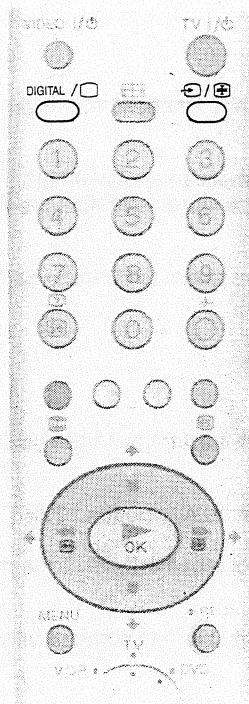
Connecting equipment to the front sockets of the TV



Note: Connecting cables are not supplied.

Connecting a PlayStation

1. Connect the lead supplied with your playstation to the sockets **H** (video input), and **I** (left and right audio input).
2. Switch on the PlayStation, insert a game, then press the \odot/\square button on the remote control repeatedly until the picture appears on screen.
3. Press the **DIGITAL/** button when you wish to return to normal TV operation



Connecting an S-VHS/8mm/Hi8 Camcorder

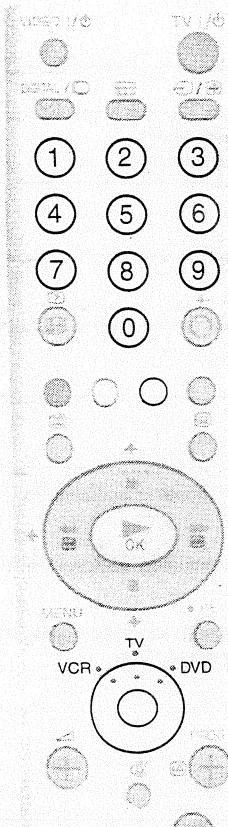
1. Connect your camcorder to the sockets **G** and **I** or **H** and **I** as shown.
2. Press the 'PLAY' button on your camcorder, then press the \odot/\square button on the remote control repeatedly until the picture appears on screen.
3. Press the **DIGITAL/** button when you wish to return to normal TV operation

Connecting headphones

1. Connect your headphones to the **F** socket on the TV.
2. Use the ' \odot Audio-out vol.' feature of the TV to adjust the headphone volume (refer to the 'Sound adjustment' menu).

Using the remote control with VCR and DVD players

This remote control has been configured to operate not only Sony DVDs and VCRs but also those made by other manufacturers. To operate other makes of DVD and VCR using this remote control, complete the following procedure:



1. Find the 3 digit code for your brand from the list below. If your brand has more than one code allocated to it, make a note of the first code only at this stage.
2. Press the Media Selector button on the remote control until either the VCR green light or the DVD green light illuminates.
3. With the required green light illuminated, press and hold down the **YELLOW** button for approximately 6 seconds, until the light starts to flash.
4. Using the **numbered** buttons, enter the 3 digit code for your DVD or VCR. Once a correct number has been entered, all three green lights will illuminate momentarily.
5. Turn on your DVD or VCR and check that the remote control operates the main functions. If not, repeat steps 2 - 4 and enter the next 3 digit code allocated to your brand of VCR or DVD.
6. When you wish to use the remote control to operate the TV again, press the Media Selector button until the TV green light illuminates. Don't forget to select VCR or DVD using the Media Selector button every time you wish to operate that equipment with this remote control.

Note:

The brand codes you set may be lost if weak batteries are not replaced immediately. Should this happen, use the above procedure to reset the code. A small label has been attached to the inside of the battery cover for you to make a note of your brand codes. Not all brands and models of DVDs or VCRs are covered in this list. However, Sony will endeavour to update the software periodically, so please refer to the code table provided with your remote control.

VCR Brand List		DVD Brand List	
Brand	Code	Brand	Code
SONY (VHS)	301, 302, 303, 309	SONY	001
SONY (BETA)	301, 302, 303, 309	AIWA	021
SONY (DVD)	304, 305, 306	DENON	018, 027, 020, 002
AIWA	325, 331, 351	GRUNDIG	009, 028, 023, 024, 016, 003
AKAI	326, 329, 330	HITACHI	025, 026, 015, 004
DAEWOO	342, 343	JVC	006, 017
GRUNDIG	358, 355, 360, 361, 320, 351	KENWOOD	008
HITACHI	327, 333, 334	LG	015, 014
JVC	314, 315, 322, 344, 352, 353,	LOEWE	009, 028, 023, 024, 016, 003
LG	332, 338	MATSUI	013, 016
LOEWE	358, 355, 360, 361, 320, 351	ONKYO	022
MATSUI	356, 357	PANASONIC	018, 027, 020, 002
ORION	328	PHILIPS	009, 028, 023, 024, 016, 003
PANASONIC	321, 323	PIONEER	004
PHILIPS	311, 312, 313, 316, 317, 318,	SAMSUNG	011, 014
SAMSUNG	339, 340, 341, 345	SANYO	007
SANYO	335, 336	SHARP	019, 027
SHARP	324	THOMSON	012
THOMSON	319, 350	TOSHIBA	003
TOSHIBA	337	YAMAHA	018, 027, 020, 002

Specifications

TV System	I/DVB-T
Colour System	PAL NTSC 3.58, 4.43 (only Video In) MPEG-2 MP@ML
Channel Coverage	UHF:B21 - B69
Picture Tube	KD-28DX200U: FD Trinitron 28" (Approx. 71cm measured diagonally). KD-32DX200U: FD Trinitron 32" (Approx. 82cm measured diagonally).
Sound Output	Left/Right:2x20W (music power), 2x10W (RMS) Subwoofer1x30W (music power),1x15W (RMS)
Power Consumption	KD-28DX200U: 138W (1w standby) KD-32DX200U: 154W (1w standby)
Dimensions (w x h x d)	KD-28DX200U: Approx. 789 x 533 x 510mm KD-32DX200U: Approx. 910 x 586 x 586mm
Weight	KD-28DX200U: Approx. 46.5kg KD-32DX200U: Approx. 64kg
Rear Terminals	<p>—○1 21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output.</p> <p>—○2 21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output</p> <p>—○3/—○3 21-pin Euro connector (CENELEC standard) including audio/video input, S-video input, selectable audio/video output.</p> <p>—○ Conditional Access Module</p> <p>—○ RF In</p> <p>—○ <small>LAVISH Audio</small> Audio output - RCA phono jacks</p>
Front Terminals	<p>—○4 Video input - phono jack</p> <p>—○4 S video input - 4 pin DIN</p> <p>—○4 Audio inputs - phono jacks</p> <p>—○ Headphones jack - minijack stereo</p>
Accessories Supplied	RM-933 remote control (1) IEC designated size AA battery (2) RF Loophthrough cable

Design and specification are subject to change without notice.

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Possible causes	Solutions
No picture, no sound.	<ul style="list-style-type: none"> Power off. TV in standby. Aerial disconnected. 	<ul style="list-style-type: none"> Plug in the TV. Press the button on the front of the TV. If the indicator is on press the button on the remote control. Check aerial connection.
Poor or no picture (screen is dark), but good sound.	<ul style="list-style-type: none"> Picture preset level adjustment. 	<ul style="list-style-type: none"> Select 'Picture Adjustment' menu then adjust the brightness, picture and colour levels.
No picture on any channel after digital tuning.	<ul style="list-style-type: none"> No digital transmission in your area. No digital transmissions from the transmitter you are currently using. Unsuitable aerial. Weak signal. 	<ul style="list-style-type: none"> Use the 'Manual Tuning' instructions of this manual to tune in all available analogue channels. Then contact a local installer to find out when digital transmissions begin in your area. Contact a local installer to find out at which transmitter your aerial should be pointing. Change your aerial to cover the channels used by digital programmes. Ensure your aerial is correctly aligned to the transmitter. Ensure your aerial is plugged directly into the TV (not through other equipment). Upgrade to a higher gain aerial.
Some channels are blank.	<ul style="list-style-type: none"> Scrambled or subscription-only channel. Programme used only for data (no picture or sound). Programme not being transmitted. 	<ul style="list-style-type: none"> Subscribe to a pay-TV broadcaster. See 'Skipping a programme' section. See 'Re-arranging your channels' section.
Standby indicator flashing.	<ul style="list-style-type: none"> Fault (irregular flash). Digital mode Timer Record active (regular flash). Software download operation has began. 	<ul style="list-style-type: none"> Do not open the cabinet, refer to qualified personnel. Contact your nearest SONY Service Centre. Clears when the Timer Recording stops. Clears when the software download is complete.
Good picture, no sound.	<ul style="list-style-type: none"> Volume control. 	<ul style="list-style-type: none"> Press the + button on the remote control. If is displayed on the screen; press the button on the remote control.
Poor picture quality.	<ul style="list-style-type: none"> Wrong external mode selected for an RGB video source. 	<ul style="list-style-type: none"> Press the button repeatedly until the RGB symbol is displayed on screen.
No colour on colour programmes.	<ul style="list-style-type: none"> Colour level setting. 	<ul style="list-style-type: none"> Select the 'Picture Adjustment' menu then adjust the colour setting.
Remote control does not function.	<ul style="list-style-type: none"> Batteries low. 	<ul style="list-style-type: none"> Replace the batteries.
Distorted picture when changing programmes or selecting teletext.	<ul style="list-style-type: none"> Inputs from external equipment not switched off. 	<ul style="list-style-type: none"> Switch off all additionally connected equipment.

- If you continue to have these problems, have your TV serviced by qualified personnel or you can contact the Sony Customer Information Line on 0870 599 1999.
- NEVER open the casing yourself.

INDEX

A

Aerial, connecting 5
AI (Artificial Intelligence) 23
Analogue and digital programmes, switching 7
Auto Format 25
AV3 Output 25

B

Balance, changing 24
Brightness, changing 23

C

Camcorder, connecting 30
Channels, automatically tuning digital 16
Channels, automatically tuning analogue 25
Channels, fine tuning 28
Channels, manually tuning digital 17
Channels, manually tuning analogue 27
Channels, naming analogue 27
Channels, searching for digital 19
Channels, skipping 27
Channels, sorting analogue 25
Colour, changing 23
Contrast, changing 23
Country, selecting 26

D

Decoder/Set top box, connecting 29
Digital and analogue programmes, switching 7
DRC Mode 23
Dual Sound 24
DVD, connecting 29
DVD, operating with TV remote 31

E

Equaliser Adjustment 24
EPG 21

F

Features Menu 25
Format Correction 25
Further Programme Preset menu 28

H

Headphones, connecting 30
Headphones/Dual Sound 24
HiFi, connecting 29

L

Language, selecting 26

N

Noise Reduction 23
O
Overview, TV set 8
Overview, remote control 9
P
Parental Control 16
Personal ID 26
Picture Mode 23
Picture Rotation 26
Picture Settings, adjusting 23
PIN Code 17
Playstation, connecting 30
Programmes, recording digital 22
Programmes, sorting 25

R

Remote control, overview 9
Remote control, inserting batteries 4
Reset 23
RGB Set Up 26

S

Screen size, changing 13
Sharpness, changing 23
Sleep Timer 25
Smartlink VCR, connecting 29
Software Download 18
Sound Effect 24
Sound Settings, adjusting 24
Specifications 32
System Information 18

T

Text, analogue 11
Text, digital 10
Troubleshooting 33
TV, switching on 5
TV, menu system 23

V

VCR, connecting 5
VCR/DVD, operating with TV remote 31
Video channel, finding 7
Virtual Effect 24
Volume, adjusting for audio output phono jacks 24
Volume Control, automatic 24

W

Wallpaper 15

Lifting Instructions

Sony strongly recommends that this TV should not be lifted by less than two people.

When lifting, always grip the TV as shown below.

Always assume the correct posture when lifting.

Take care not to trap your fingers when placing the TV on a flat surface or stand.

